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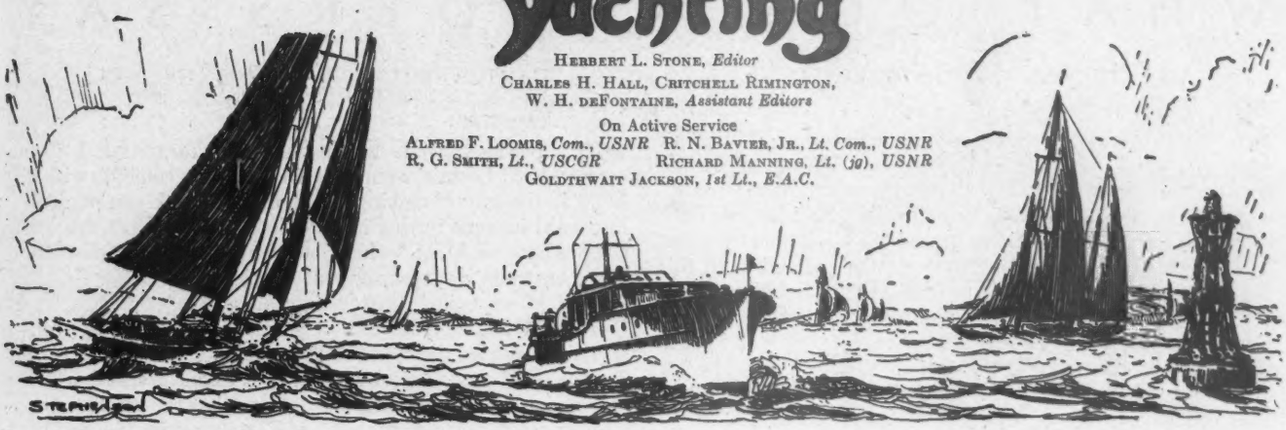

VOL. LXXVII JANUARY, 1945 NO. 1

THE MARINE INDUSTRY AND THE WAR

IN the pages which follow, YACHTING offers a preliminary preview of the designs, materials, equipment and techniques which will serve to shape tomorrow's pleasure boat. It is representative to the extent that the marine industry has been invited to present to this magazine's readers some details of its postwar plans. Of necessity, much of the material represents advance thinking and hence is not always conclusive. It is also to be noted that many well-known names are absent, but in every instance this is only because the individual or firm has circumstantially been unable as yet to announce its peacetime program. These will, however, be reported in subsequent issues of YACHTING.

We cannot for one moment forget that a long, difficult and costly war — and one in which the marine industry is playing an important part — is still to be won. "What," a reader might therefore ask, "is the point of being concerned with pleasure boats for the future at a time when the whole world is in conflict?"

There is an answer. Since the tragedy of Pearl Harbor, YACHTING has reported — in both text and picture — the roles which vessels of moderate size have played, and are playing, in this war. Their design, construction and operation have been described in great detail. This we shall continue to do, not only in the interest of our readers, but as a significant chapter of the war record. Yet during these past years we have had many letters, and a substantial majority of them from men in service, to the effect that the writers are living the war twenty-four hours a day and that they turn to the pages of YACHTING for rest, for relaxation, and as a stimulus for thoughts of those things which make what they are fighting for worth while.

While we shall continue to follow our policy of reporting that phase of the war at sea which we believe does, or should, concern our readers, we also feel that it is now not only proper but necessary to scrutinize the horizon briefly. For many boat-builders, their work in behalf of the war has, at least temporarily, been concluded. It is most important that they, like the manufacturers of automobiles or egg beaters, keep their organization intact. This, then, is the time when it is proper to lay the groundwork of reconversion, and do the necessary planning and experimental work which will enable them to build a better product in the days of peace. It is in that interest that this "Postwar Preview Number" is presented.

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WHAT OUR READERS SAY

"Premature," a Pre-peace Auxiliary

Editor, YACHTING:

▶ A cantankerous old man you may call me if you like, but when you wrote us a letter and, we quote, "We will appreciate hearing your views on any and all phases of the postwar yacht," it made me so mad that Missus Shipwright banished me from the house for the day. Why was I mad? Well, it was that *post* business that made me mad. Post means behind and when this shipyard starts doing anything behind anything it will go broke. We aim to be ahead. *Pre* is the word we use around here to get along. Why we even fix things just before they break and call it prefixing. Post this and post that, we are sick of that word post. Postwar, posthumous, and posterior, all have the same general dead end flavor, always behind like the tail on a cow. Why, YACHTING even had an article about postwar boats last January and it looks as though they were stalled right there at the post, like in a horse race when someone forgets to turn the switch on your favorite horse!

Well, anyway, now that we have cooled off enough to be let back into the house, we will describe a few of the salient features of *Premature*, our prepeace auxiliary. No, she is not plastic, though some folks claim her designer was plasticated from drinking our special premedicated, or aspirinated liquor during working hours. This liquor is new, too, and has the aspirin mixed right in it by way of presupposing and preventing a headache and we give a case away free with each genuine, premature, deluxe model. To get back to the hull, we will tell you this much. It is not plastic, in fact it is quite rigid, but it is self-sealing like these bullet-proof tanks you hear about. Just think of the comfort and relaxation of sleeping under a self-sealing deck, the greatest boon to yachtsmen since the invention of Flit.

Another salient feature is our brand new static electric combined anchor windlass, knot tier and mooring line projector. This windlass has an indicator that you can set for any ordinary knot, a bowline, a clove hitch or even a main brace splice. All you have to do is set the indicator, feed in the line and it comes out with the knot all tied and, better still, the special composition line is so charged with static electricity that it is temporarily stiff enough to be extended as much as 20 feet and dropped neatly over a pile. Just think what that will do to cure the inferiority complex so common to yachtsmen when they get near a wharf! Think how it will be appreciated when we look back and post-mortemize about the barbaric days when we approached wharves with fear and trembling and, after numerous tries at getting a line over a pile, suffered the indignity of having our wife succeed in coaxing the noose in place with a mop.

Then, of course, there will be other things. We have noticed, for instance, that yacht designers are still working on the theory that yachtsmen will someday learn that you do not drop the anchor on the spot where you expect the boat to be after anchoring. The fact that there has been no improvement in yachtsmen in this respect over a period of many generations does not discourage the designers who continue to equip boats with anchors and cable. Suffice it to say that in *Premature* this problem is solved once and for all by just letting the mast down through the self-sealing bottom until it sticks in the mud. This idea, which is really an adaptation of pile driver technique, solves the problem neatly, anchors the boat securely, and reduces windage while at anchor.

Of course, there are other features. For example, there is a combination automatic pilot and sounding machine that makes *Premature* shy off and yell "Land ho!" just before you run aground, but we cannot tell you all about it at this time. In fact, it looks as though, in a fit of rage, we have told you a lot too much already. This probably comes under the head of giving comfort and succour to or making a sucker of your competitors. Anyway, you had better give this to your censor to read before you publish it and, if he cannot figure it out, then try it on your nonsenser; if you have been offended by any of this, remember that even murder really to count must be premeditated!

CAPTAIN JOHN SHIPWRIGHT

The Bright Future of the "Landing Craft-Yacht"

Editor, YACHTING:

▶ This morning, while reading through YACHTING, I came across Alfred Loomis' comments on what you could do with an LCM in the way of making her a yacht. I think you might be interested in some further information on the subject. At present, we have an LCM * which has come all the way from Brisbane, Australia, up to our present location here in New Guinea. This LCM was sailed nonstop right across the Coral Sea from Cairns to Milne Bay, as was a 45′ picket boat. A 99′ Army transport accompanied them, but in the rough weather in the Coral Sea the LCM made better weather of it than the transport.

We have decked over seven LCMs, so that the whole well or cargo space is covered. We used any lumber we could get, but some have an expensive deck, namely 1½-inch plywood. Maybe when we get to the Philippines we will redeck them with mahogany or teak if we can get it. Imagine a teak deck on an LCM!

As a result of this decking over, most of our LCM gunboats have twelve berths (stretchers) built in tiers along the sides. There is also a large galley containing an Army field range and oil drums for water. In some cases, we use the side tanks, which hold about 500 gallons, for water. Since an LCM has a ramp, we retain it so that we can get a jeep under the deck. So far there are no ice boxes. LCMs have side or wing tanks for flotation. We have piped these to carry extra fuel and now have a total of about 2500 gallons of fuel. They burn about a gallon of diesel fuel per mile when running both engines.

One 56 foot LCM has 16 berths, and a couple of them have dinettes like cabin cruisers. I converted the first one for Lt. Col. Robert Amory, Jr. of the Eastern Yacht Club. He is my battalion commander and he uses his LCM in preference to a 65′ crash boat. He says he can stay with his other LCMs in convoy and in an LCM you don't have to worry much about coral reefs because landing boats can hit bars and reefs without much harm.

For peacetime use they would make nice seagoing houseboats, with room for a jeep. There are not many power boats that have twelve bunks, a seagoing garage, a large galley, plenty of room in the flattop, plus headroom of eight feet aft and six feet forward. The boats are not hot because the decks are built level and meet the gunwales only at the cargo well up by the ramp. Hence, the breeze can blow through the cabin under the deck. A decked over LCM would make a good committee boat.

There is no expense attached to hauling out an LCM. You just beach, and paint her bottom when the tide goes out. Then you get the local welder from a garage to come down and make any necessary hull repairs. Hence my advice to anybody is to buy an LCM cheap (maybe two should be bought to get spare parts for the motor) when the Navy puts them up for auction. You can spend the whole winter converting her to suit your taste. A home carpenter can do the work; if you don't like the arrangement, you can put in a new interior the next winter.

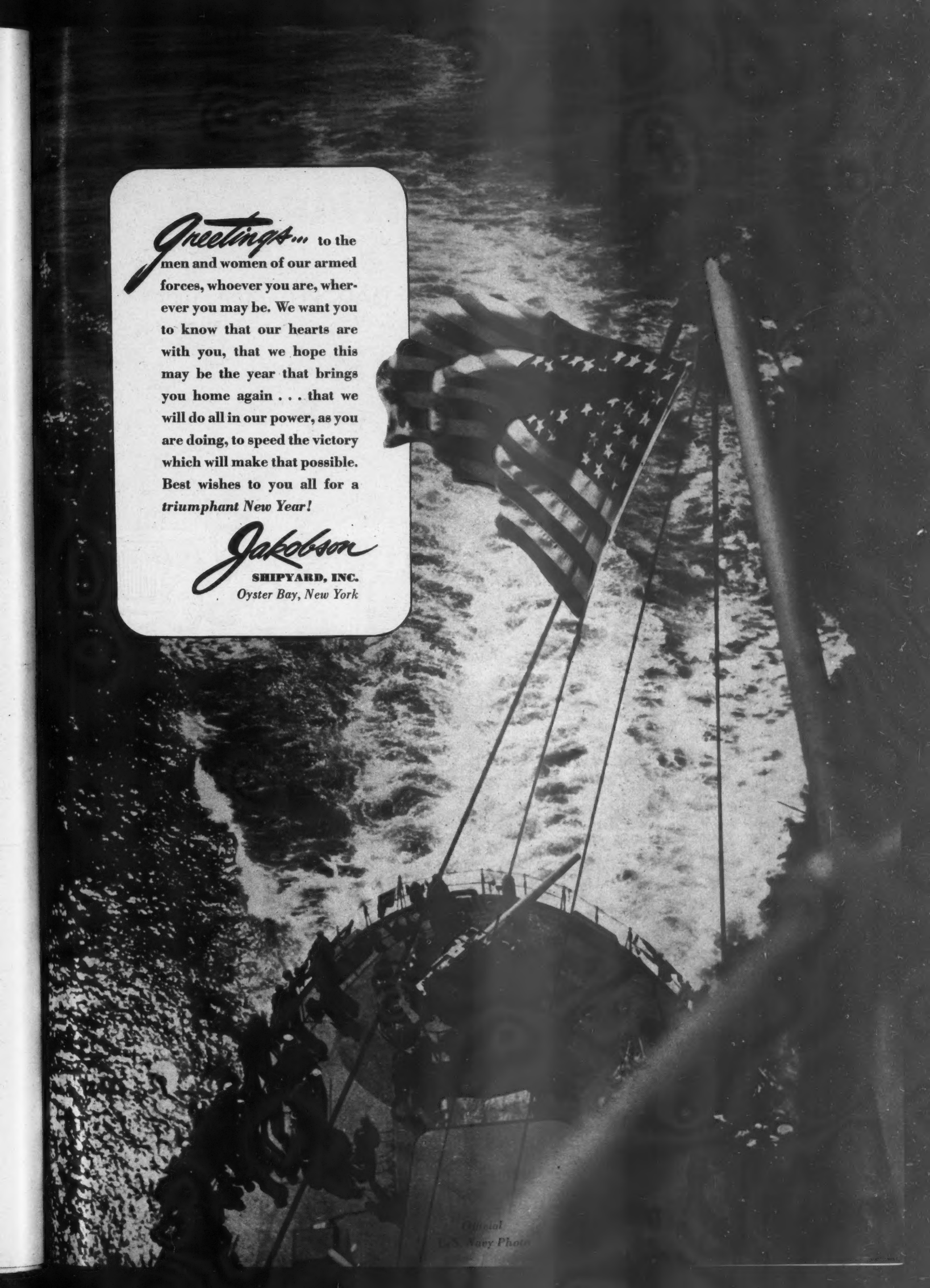
Because of the small rise and fall of tide in New Guinea we haul them out with a bulldozer. You can drag an LCM over a beach with no harm, and we launch and haul them with our heavy engineering equipment as fast as you can a frostbite dinghy. The big maintenance problems are the gears of salt water pumps wearing out because of the sand, propeller shafts bending when backing off beaches or offshore bars, and strut bearings. We even make strut bearings out of hard wood.

In New Guinea we have used the gunboats as support along the beach. Several times we have rescued our infantry when surrounded by Japs near the beach, and our fire power kept the Nips back so that we could beach and pull off the infantry. In fact, the infantry won't advance in this area without at least two of our gunboats along for flank protection. They know that they can always swim out to us and we can stay right in the line of breakers without worrying about hitting bottom.

DICK MAXWELL

Somewhere in
the Southwest Pacific

* (LCM is the designation for a 56′ Landing Craft, Mechanized. — ED.)



Greetings... to the men and women of our armed forces, whoever you are, wherever you may be. We want you to know that our hearts are with you, that we hope this may be the year that brings you home again . . . that we will do all in our power, as you are doing, to speed the victory which will make that possible. Best wishes to you all for a *triumphant New Year!*

Jakobson

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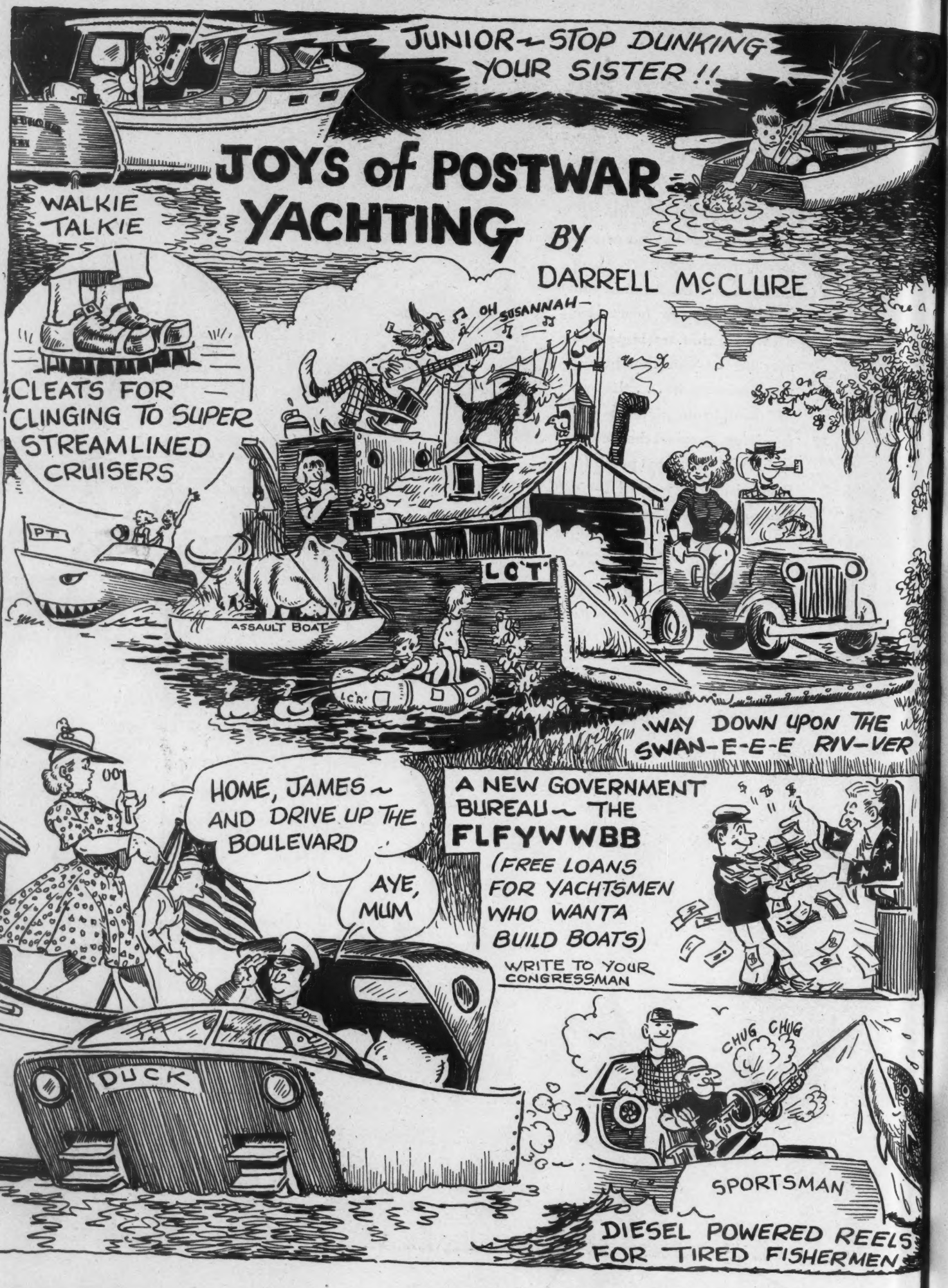
JUNIOR — STOP DUNKING YOUR SISTER !!
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CLEATS FOR CLINGING TO SUPER STREAMLINED CRUISERS
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YACHTING'S POSTWAR SURVEY

Within the past year YACHTING has given increased editorial attention to what representative yachtsmen would like the postwar boat to be. Necessarily such comment has been, with but few exceptions, theoretical. And, although considerations of new materials, new building techniques and construction costs have received a proper share of attention in such discussions, a majority of the comment published to date has been from yachtsmen. Recently, however, a questionnaire asking five pertinent questions was sent to architects and builders, and here is published a consensus of the many replies received.

1. "How soon do you believe the construction of pleasure boats will be permitted?"

(Architects) — Opinions on this question are widely scattered. Twenty-five per cent believe that no construction will be permitted until the war in Europe has concluded; an equal percentage see little possibility of new building until late in 1945, while the opinions of the remaining architects questioned give predictions ranging from this winter to two years hence.
(Builders) — A substantial number of builders, who are perhaps best equipped to answer this question, give VE day as the probable date for the "go ahead" signal, while some 20 per cent say "late in 1945." Since most military experts give the coming summer as the hoped-for date of Germany's defeat, it would indicate that the autumn of 1945 is the date to reckon with. This means, in most instances, that new boats in any quantity would not be available until early in 1946.

There are some 10 per cent of the builders who think that no pleasure boat construction will be possible until Japan is defeated. Yet another 10 percent give the spring of this year as "the date," and a few optimistically say "immediately."
Conclusion — The weight of current opinion points to next autumn as the time when volume construction of "the postwar yacht" can begin.

2. "Do you think that postwar pleasure vessels will be cheaper, more expensive, or will approximate prewar price levels?"

(Architects) — On the basis of the replies received it is apparent that the question should have been phrased so as to assume that boats would be more expensive, and to have asked *how much* the increase would amount to. This is confirmed by the fact that an overwhelming majority of the replies indicate that increased prices are inevitable. Some 75 per cent of the architects feel that a 25 to 50 per cent increase should be expected on boats built in the next two or three years.
(Builders) — Builders are more explicit in their comment on postwar construction costs. As in the case of the architects, over 50 per cent anticipate increases of from 25 to 50 per cent, but it is significant that quite a number of them expect boat prices to return to approximately their prewar levels after the first few years of postwar construction. The above remarks may be presumed to refer to custom building, as 10 to 15 per cent of the builders believe that stock boats will be little if any more expensive (providing that postwar engine costs are not greatly increased). With respect to stock boats, the consensus is that quality will be greatly improved.
Conclusion — Postwar prices of custom-built boats constructed in the first year or two following the war will be 25 to 50 per cent higher; stock boats may remain at their prewar price levels. Labor rather than material costs will be the deciding factor, and in the case of stock boats "production line" building may act as a counter-balance.

3. "What items of mechanical equipment (other than propulsion) will be in greater use in postwar boats?"

(Architects) — Equipment trends can best be gauged by a tabulation in order of the preferences given on the questionnaires returned: Refrigeration, radio telephones, automatic steering, navigational equipment, mechanical ventilation, hydraulic controls, winches, motor generators, heating equipment, windlasses, air conditioning, pumps, electrical cooking appliances, boat hoists, sound proofing, electric toilets, flexible shafting and tubes, fire protection devices, lever rather than wheel steerers, booster type clutch operation.
(Builders) — Here the same practice can best be followed: Radio telephones, refrigeration, hydraulic controls, automatic steering devices, navigational equipment (this includes direction finders, etc.), electric cooking appliances, mechanical ventilation and heating, lighting plants, fresh water cooling systems, automatic power plants, winches, windlasses, air conditioning, mechanical blowers, motor generators, automatic fire protection, sail handling devices, boat hoists, electric toilets, roller screening, booster type clutch operation, sounding devices, rubber bearings, pressure water systems, anchor handling devices, smaller engines.
Conclusion — Radio telephones and mechanical refrigeration are the two most popular of the many new types of equipment which will be in greater use.

4. "What materials, other than wood, do you think will be commonly used to build tomorrow's boat?"

(Architects) — There is no revelation in the statement that plywood (both molded and sheet) has a bright future insofar as marine applications are concerned. Most yachtsmen are of that opinion, and it has been emphatically confirmed in this survey. On the other hand, metal has received considerable attention insofar as boats over 50′ o.a. are concerned. Stainless steel, aluminum and other light metal alloys appear to be the materials with which much experimental construction will be done. Plastics are in high favor as regards the hulls of smaller craft, as well as for cabin appliances and fittings.
(Builders) — Plywood is also the high scorer of the builders' poll. Other materials receive a wide diversity of comment. There are, interestingly enough, almost as many comments of "not metal," "not plastic" as there are votes in favor of these two materials. But here again metal for boats over 50′ o.a. receives considerable attention. Among the builders there is a unanimity of opinion that plywood will also be in wide usage in the construction of decks, cabin houses and interiors.
Conclusion — Plywood will be used for almost every type of marine construction. Both builders and architects are as yet somewhat hesitant about plastics, feeling that considerable development work still needs to be done, yet they anticipate a wider use of plastic superstructures, dinghies, etc. There will be more boats built of metal, particularly those over 50′ o.a.

5. "Do you believe your volume of boat construction (or design) in the first few postwar years will exceed that of the last prewar years?"

(Architects) — Eighty-five percent believe that the first postwar years will see more boats under construction than in any time in yachting history. Out of the replies received, only three architects were of the opinion that increased costs of construction would have a dampening effect.
(Builders) — Seventy-four percent of the nation's builders share the architect's belief about the future. By strict analysis, this percentage is even more revealing than that of the architects, as it represents many more individual votes (since considerably more builders than architects replied to the questionnaire).
Conclusion — A postwar yachting boom appears to be inevitable.

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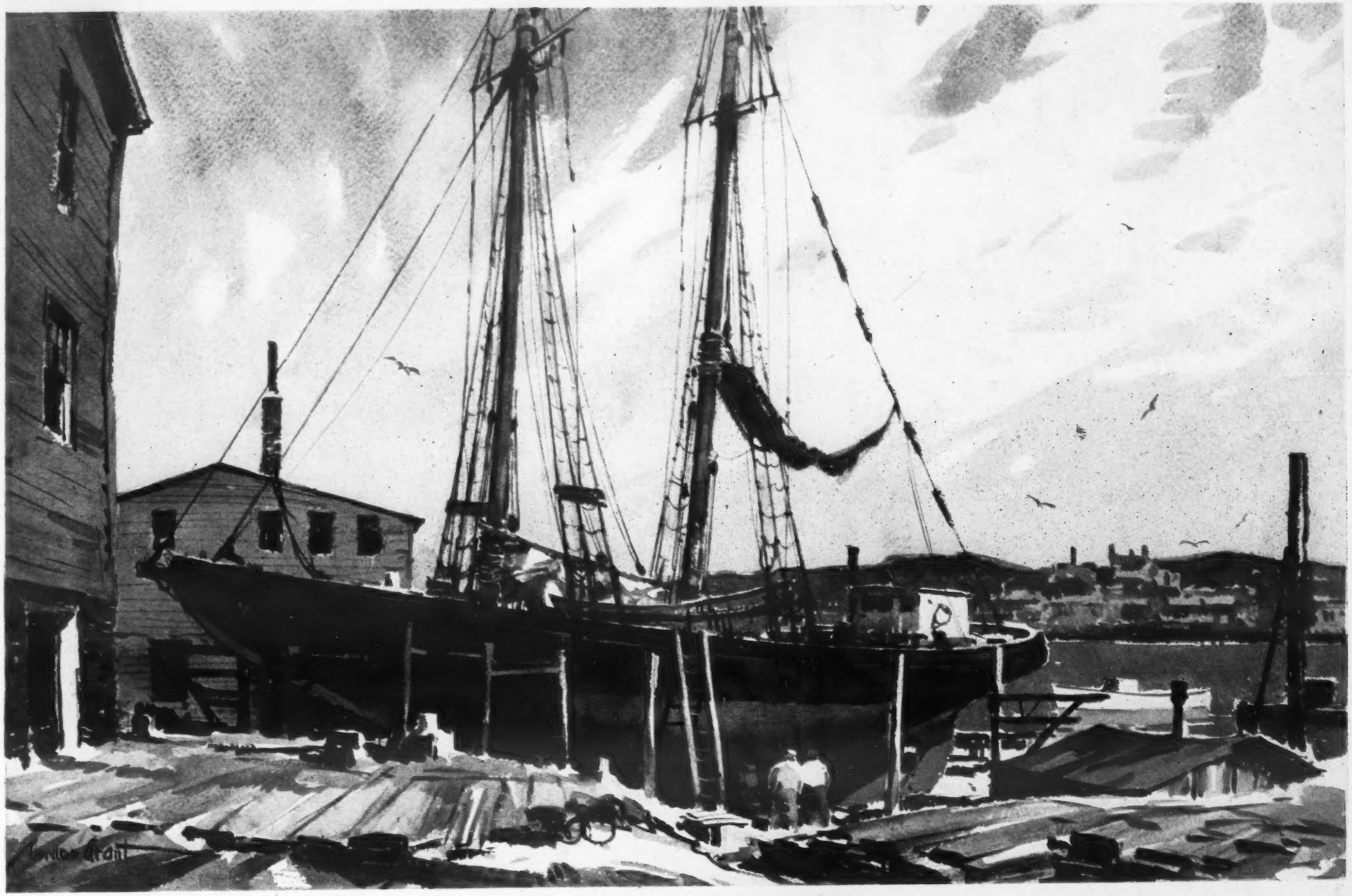


"HAULED FOR REPAIRS AT GLOUCESTER"

By GORDON GRANT

YACHTING

Volume LXXVII JANUARY 1945 Number 1

Marblehead Harbor during a prewar Midsummer Race Series. When peace comes, anchorages at all yachting centers will see an increasing number of pleasure craft swinging to their moorings

YACHTING AFTER THE WAR

While the Immediate Future Is Still Uncertain, the Pattern Is Already Taking Shape

By HERBERT L. STONE

WHAT is yachting going to be like after the war? What kind of boats are we going to have; what will they look like and what will they cost? These are the questions most frequently asked when yachtsmen get together for a gam, and the ones they most frequently ask us.

It would seem as if one were taking on quite an order when he tries to forecast the pattern of yachting activity after the war, when that war is not over and its end is not even in sight. In our confidence in the ultimate outcome, too many of us are prone to believe that the end is "just around the corner" and that the need for maximum effort behind the lines has slacked off. This is a dangerous assumption for, as this is written, there is still much long, hard fighting ahead, both on land and sea, and ultimate victory over both of our enemies is still in the unpredictable future. One should not be optimistic of an early victory.

Having stressed this point, however, it is still possible to look ahead and, as far as possible, to plan for the future, both as to a way of life and in business. Not to do so would be to fail in the objectives for which we are fighting and to retard recovery when the end comes.

Looking at the yachting picture, and first as to the sport itself (or recreation, should it be called?), all hands are agreed that more persons are going to turn to the water for their recreation than ever before. While boating for pleasure before the war had reached sizable proportions in many localities, and supported a well established industry, full use of the waterways of the country had by no means been reached. Except along the coasts of the United States and on the Great Lakes, interest in boating was slight and waters that might have afforded pleasure were used but little, if at all. Yachting was frequently looked upon as a rich man's sport and boat owning as an expensive and needless luxury. This had long since ceased to be true. The very large yacht, whether sail or power, was on the way out, and the day of the small and medium sized boat, which has always been the backbone of the sport, had arrived. This was a healthful trend.

After peace comes, yachting will be widespread and more popular than ever before. With the opening of large bodies of navigable waters throughout the country, and particularly in the Middle West and the Southwest, as is described elsewhere in this issue, boating has been made available to thousands who before hardly knew the shape of an oar. The idea of a yacht being the symbol of wealth will largely disappear if it has not already done so, and in its place will come the realization that small and medium sized bodies of water, if navigable, offer more healthful enjoyment than restricted and congested roads or crowded resorts to the man who likes to get afloat. And the

small cruisers, the standardized power boat and the outboard will all contribute to make getting afloat possible at a reasonable financial outlay.

Therefore, to take care of the demands of those who will want to get afloat as soon as the war is over or whenever production for the war effort slackens, it is none too early to make plans for satisfying those needs. Already the Army and Navy procurement programs in the wooden boat building industry are beginning to run out, and certain yards, already faced with the need for getting back into their normal prewar fields, are making plans to do so, and are producing "pilot" or experimental models which will point the way to their future activities, or are at work on designs for "the boat of the future."

What shape these new boats will take is still a matter of conjecture. That hulls will vary to any great degree from the tried and true designs of the past is doubtful. Boats must, first of all, be seaworthy, rugged and easy to handle under a variety of conditions. Hulls that have been evolved to meet these conditions embody principles of naval architecture that builders cannot afford to overlook. Refinement of detail, more attention to living comfort, a certain amount of streamlining (if not overdone), will be seen in postwar boats, and certain lessons learned in multiple production during the war will be used in building when the war ends. Except for occasional custom jobs which will always be wanted, boats will be built with some approach to quantity production for reasons of the economy entailed. If costs are going to be higher than prewar owing to the changed wage and living standards, prices can be kept within reasonable limits only by economies in production. So there will be many more boats built to the same design and on the same jigs than heretofore.

Boats will be smaller than before the war. For the cruisers, this will mean from 25 feet up to a limit of 38 or 40 feet. In the sailing auxiliary type, our nearest prewar approach to what we may look for in the near future were such classes as the Voyager yawls, the Week-Enders, the Coastwise Cruisers, the Bountys, the Little Sisters and the Visitors and Islanders. Classes made up of a number of cruisers such as these will be developed; in the power boat field, the development will be taken up where the war cut it short, for in this field the stock or standardized small power cruisers were already headed for bigger and better things when war put a stop to all thoughts of such matters.

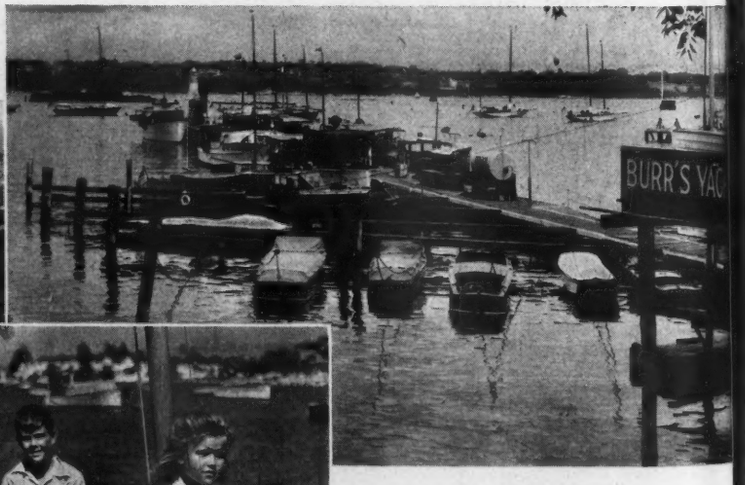
Materials will probably be largely those which were used before, plus what we have dreamed of and what has been developed and proven during the war period, such as plywood, stainless steel, non-corroding aluminum and, to some extent, plastics, although this last is still somewhat in the development stage as far as boats go. Those that will be most widely used will be the ones to get on the market first in commercially practical form and of proven reliability. The manufacturer who rushes into the field with new and untested materials which break down under hard service afloat will get badly burned, as will the owner in whose boat they are used.

Elsewhere in this issue is a discussion on the various types of new materials, both for hulls and for equipment and fittings, so it would be repetitious to go into them in detail here. However, we look to see standardized spars made of rolled plywood, sold on the basis of standard lengths to suit boats of various size and type. There will be great simplification of rigging design. With the new type of jib-headed rig, the use of plywood spars with a single set of spreaders instead of the two or more used at present, or with no spreaders at all, is a distinct possibility. These are some of the detailed developments we shall probably see.

On the engine side of the picture, the marine engine manufacturers have been much too busy fulfilling the demands war has made upon them to give much time to the pleasure boat engine of the future. They have, however, gone far in developing the internal combustion engine during the war years, and particularly the diesel, and the results of this development will be passed on to the yacht owner when peace comes. The saving of weight per horse power has been pronounced. Refinements and simplification of design have gone far and some radical changes in design have been made. When this branch of the industry has time to think of and meet the commercial demand again, the boat owner is going to get power more suited to his exact needs — if he chooses with knowledge and discrimination — than ever before.

To take care of the greatly enlarged fleets of pleasure craft in all navigable waters after the war, facilities for their care, mooring and storage must be made. These are being planned and are taking shape in the form of adequate mooring basins and marinas that are being designed and built by the federal and some state governments, by municipalities and, to a lesser degree, through private initiative. Particularly near cities and congested communities are such facilities needed. A comprehensive program of such construction that can be carried out after the war would go far to assure a rapid growth in boating, and

(Continued on page 130)



Belmont Park, Chicago, yacht basin with its many slips for the accommodation of yachts. After the war, many municipalities will have to provide such facilities for the growing fleets of motor and sailing craft. Right, yachting will be even more popular with juniors when peace comes

A New London dock where yachts make fast to take on supplies and to be serviced. A popular place during regattas and before an ocean race. There will be even more need for such stations after the war ends

WHAT OF TOMORROW'S BOAT?

A Naval Architect Discusses the Trends and Materials Which Will Shape Tomorrow's Yacht

By P. L. RHODES

GENERAL SHERMAN, that outstanding master of concise statement, is accepted universally — at least in the enlightened countries — as a man of honest conviction. War at best is a horrible thing, accepted only when overwhelming issues are at stake. The story of the wars of the past, tempered, screened and condensed, makes interesting and at times fascinating reading but, when brought home, war's uglier aspects are all too obvious. Once in it, it is something that must be faced and victory is the sole consideration. Victory is sweet but the fruits of victory are sweeter. They are the finer and more pleasant things of life for which we fight. It is natural, therefore, that our thoughts turn occasionally to these agreeable anticipations.

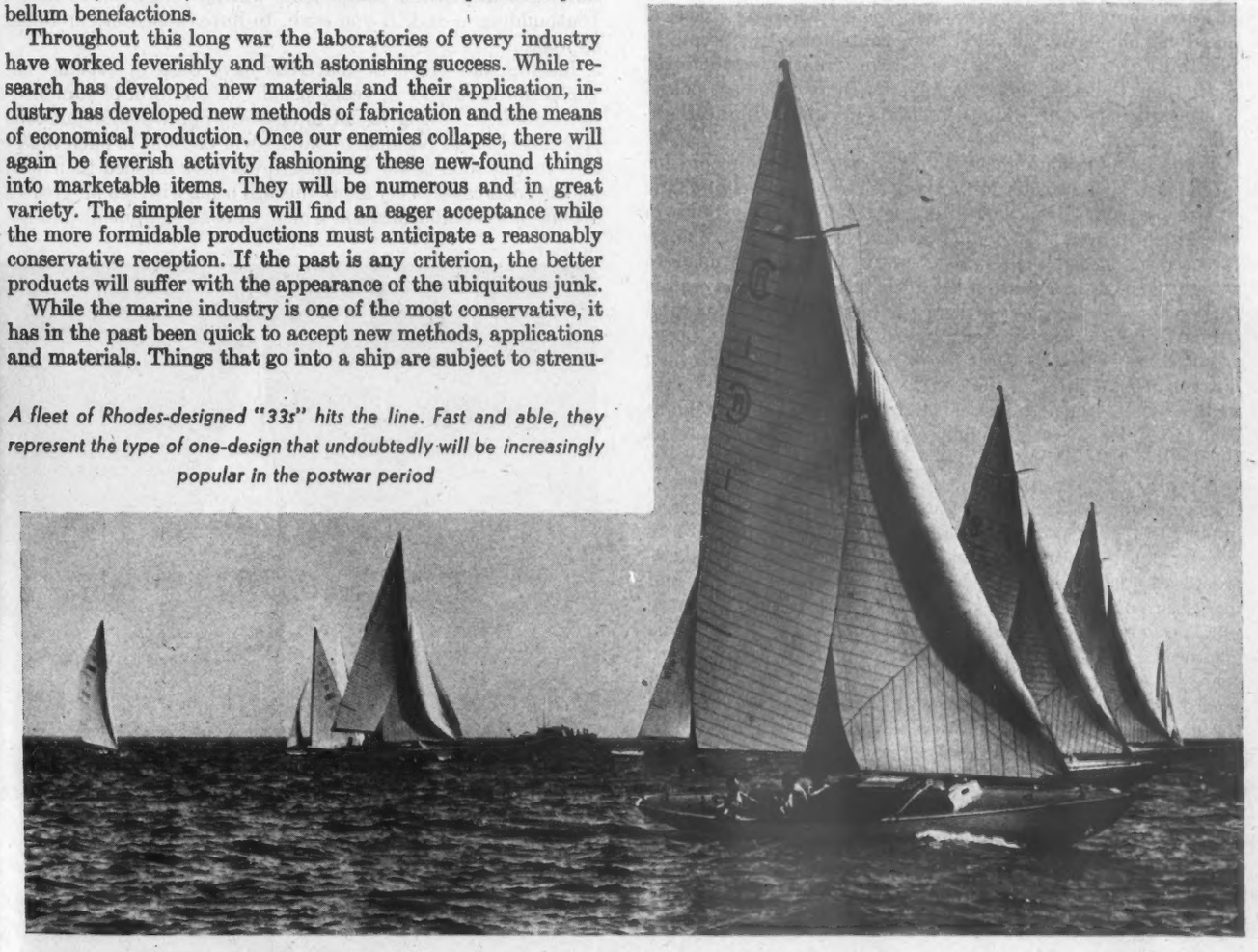
Referring again to the General's characterization of war, it is difficult to see how anything good could come out of hell. Yet we all hope for and have been encouraged to expect a lasting peace and continued freedom in which to enjoy it and that, as a by-product of war, our future daily tasks will be lessened while our moments of recreation will be enhanced by all manner of new applications of already known quantities and by the marketing of new devices and materials heretofore thought of only as pleasant ideas or as idle speculations. Unfortunately, war is hell also on our natural resources that could be put to far better use; every 25 years or so, war denudes our land of its timber. Mother Nature is a great provider but, when she is overtaxed, Mother Necessity in old lace and new crinoline lends a hand. Perhaps the latter, not war, deserves the credit for the promised post bellum benefactions.

Throughout this long war the laboratories of every industry have worked feverishly and with astonishing success. While research has developed new materials and their application, industry has developed new methods of fabrication and the means of economical production. Once our enemies collapse, there will again be feverish activity fashioning these new-found things into marketable items. They will be numerous and in great variety. The simpler items will find an eager acceptance while the more formidable productions must anticipate a reasonably conservative reception. If the past is any criterion, the better products will suffer with the appearance of the ubiquitous junk.

While the marine industry is one of the most conservative, it has in the past been quick to accept new methods, applications and materials. Things that go into a ship are subject to strenuous and harsh use and must meet the demands of rigorous test and proof. As far as the boatbuilding industry is concerned the broad use of radical innovations would come within the category of reconversion or the enlisting of new industries in their development. That industries hitherto foreign to the yachting field will become actively associated with boatbuilding once their war work is ended is a foregone conclusion. Through them will come worthwhile fittings, fixtures and miscellaneous apparatus. To build moderate size yachts of an entirely new material would require considerable time for testing and an amount of capital which would quickly absorb the modest cushion at the disposal of the average boatbuilder. He is your stand-by for the custom-built yacht, and will so continue for some time to come.

Doubtless much of the casual talk about the postwar yacht is a bit advanced and, although that is as it should be in terms of progressive thinking, the pitfall is that it may cause yachtsmen to anticipate tomorrow's yacht as a super-streamlined juke box with invisible sails, rocket propulsion, electronic refrigerators and robot galley slaves. Progressive developments in design, construction, fittings and equipment are certain to come. Perhaps it would be safe to predict without fear of being confounded later that eventually yachts will be built of utterly new substances from stem to stern and from keel to truck, but it would be fatuous to expect to find them on the market the day after peace is declared. Yachtsmen would be subjecting themselves to an enduring self denial were they to postpone their next sail

W. C. Sawyer



A fleet of Rhodes-designed "33s" hits the line. Fast and able, they represent the type of one-design that undoubtedly will be increasingly popular in the postwar period

Edwin Levick

"Nimrod II," one of the John Alden-designed Malabar Juniors. Many new materials will find their way into the boats of this type which will be built after the war

until such a craft is available.

It has been several years now since washing machines, fountain pens, hot dog stands, etc., became streamlined. They didn't need to be but in more cases than not it was beneficial. Either the article was easier to clean, less hazardous to the innocent bystander or, if for no other reason, it caused the designer and the manufacturer to look at the over all as an entity. Very often the streamlined version was sounder structurally and cheaper to produce. These products followed the lead of the automobile. Now no one can say a harsh word against the automotive industry — it did and is doing a perfectly marvelous job and did it with its own money. Yet the automobile designers were slow in streamlining their product. Perhaps it would be fairer to say that they were conservative, and probably had to be. When they first began to round off the corners they added much to the beauty of their cars and this minor concession to the second degree equation paid handsome dividends in reducing the cloud of dust that dog starred every motorist. In these earlier efforts at streamlining the designers often spoiled whatever practical aerodynamic benefit it may have contributed by promptly planting a trunk rack or a pair of "spares" on the rear bumper! Since then, the sales managers have taken over and are poised to streamline us to death in their efforts to pamper the aesthetically underprivileged.

While the aviation industry hung up the all-time record for mechanical achievement, for years it seemed positively allergic to streamlining. It was ages after the Wrights, Casey Baldwin and others proved that flying was practical before the manufacturers abolished their orange crates and condescended to recognize the design motif of the lowly but highly aerodynamic turkey buzzard. Thereupon there was a great demand for wind tunnels and the government, wisely and fortunately, contributed vast sums to aeronautical development through such outstanding facilities as the NACA and the military. With a nod to subsidy the aeronautical engineers have done a magnificent job and their mental equipment is just as streamlined as their products.

All this may seem to have little to do with yachts. However, it has a distinct bearing on the present trend in streamlining as applied to them. Streamlining a briar pipe will not make it any sweeter but it may strike your fancy; nor will it make the electric toaster pop quicker. Yet it makes an aeroplane sweeter and makes it pop much faster. But, aside from creating a more pleasing appearance, does it do the automobile any good? The answer is a decided yes. It need but be pointed out that at any speed above 35 m.p.h. windage becomes the principal resistance. Hence anything that will lessen this wind resistance improves the steering and saves gas and tires — cause enough, indeed. In comparison, yachts, in general, are much slower creatures; while windage is not to be ignored it is seldom of prime importance.

All things being equal, the ratio of water resistance to air resistance is approximately the ratio of their densities, or 840 to 1. The above-water portion of a hull is not the equal of the underbody in smoothness of form and it has far more area which contains eddy-making features, so that the above ratio is too optimistic. But if the ratio were reduced a hundred fold the air resistance would still be but one-eighth the total. Furthermore, wind resistance increases as the square of the speed whereas water resistance increases as the cube; from which, obviously, the higher the speed the less becomes the relative importance of wind resistance.

This does not mean that the writer is opposed to streamlining and to its assuming its rightful place on the water. Nothing could be further from the truth. He appreciates its effortless beauty and defends its utility, but he also knows its limitations. However, he could not resist this opportunity to point out that some of the unusually attractive pictures of over-streamlined craft which have been published in recent months should not mislead the public into believing that the plastic age is upon us and expecting too much too soon.

The naval architect has not been backward in grasping the significance of streamlining; in fact, he created it. From the days of Noah's assistant down to the present, every naval architect's scratch pad has been resplendent with sketches of streamlined models which would dispirit the most imaginative efforts of any other field. That so few such models have ever been built is due solely to the fact that, using the available materials heretofore suitable for boatbuilding, the cost of all out streamlining is more than the owner is willing to pay. Cars and planes are utility vehicles, economically built in staggering quantities and, happily, their constructional medium is amenable to such treatment. Admittedly, in boatbuilding, we have but scratched the surface in so far as plastics, plywood, metals, compositions and fabrics are concerned. One may be optimistic that the further development of these components will prove a boon to future boatbuilding — and, if you wish, to impassioned streamlining as well.

Plastics and synthetic materials have been in evidence on yachts for a number of years, usually in the form of standardized products having broad industrial application. Numerous specialized items peculiar to yachts will be built of such materials just as soon as the manufacturers have finished their jobs for the great cause. Very likely this will bring with it a far greater attention to standardization which, in boat equipment and fit-

"Tamaris," an 81-foot all-welded centerboard ketch, designed by P. L. Rhodes and built by Burger for Ralph T. Friedmann. The first butt-welded steel yacht, she is an outstanding example of the use of metal for boats of this size

tings, is long overdue. As one small example, lignum vitae yacht blocks will give way to blocks with plastic shells of many hues. The much pursued nylon will again acquire shapeliness in the form of spinnakers and other off-the-wind sails for which recent experiments by Ratsey have shown it to be ideal. It combines great strength with considerably less weight than cotton. Sails will thus be lighter and much thinner, which will help greatly in the age-old battle to lick the stowage problem. These features, combined with smoother surface, less porosity, and water-repelling qualities should spell increased efficiency. Further, and to its everlasting glory, it is quick drying and mildewproof. The use of nylon for sails is still somewhat in the experimental stage but it is reassuring to know that duPont is pressing its development and for fore and aft sails also.

Duroduck, yacht duck treated with Koroseal, is another development calculated to excite the sailorman. When made of this material, sails, covers and awnings will be rainproof, spotproof and mildewproof and can be furled wet and left until the next week-end without disaster. It comes in various colors. The Celanese Corporation expects to offer sailcloth made of its new Fortisan. This is another superlative fabric combining unusual strength with lightness of weight. Here again is a waterproof and mildewproof product which, because of its great dimensional stability, would produce sails not likely to lose their shape. Cordage is also on the agenda and Fortisan rope should be waterproof, kinkproof and stretchproof. It will be stronger than manila and so light that the racing skipper would no longer find it necessary to carry light weather sheets. New fabrics for upholstery will be much in evidence. Word comes of a leather-like waterproof covering in various colors which constant exposure will not crack.

Sheet plywood was quickly recognized some years ago as a most useful boatbuilding material. At first, it had its limitations due almost entirely to the inadequacy of available glues. Today, the plies are permanently bonded with glues entirely impervious to moisture and this material has assumed an indispensable status. Now found in almost every yacht, it is produced in sheets up to 50 feet in length and is excellent for hull sides, decks and house tops besides the customary use for bulkheads and interior joinery. It is particularly useful for many types of small craft, permitting light weight with rugged strength. It is graciously subservient to the amateur builder and, once it is again released to the public, a great quantity of it will find its way into cellar and garage workshops. The Penguin dinghy is a notable example of plywood construction. Designed originally for "Bill" Dyer, she subsequently was acquired by YACHTING and presented to the wide awake national organization under whose guidance it has been and is being built by literally hundreds of amateurs throughout the world.

The postwar yacht will continue to use plywood in ever-increasing quantities, and the more recent molded plywood offers fascinating possibilities. This process, where the plies are fashioned over a form and glued under heat and pressure into one monolithic whole, was well in hand before the war. Excellent dinghy hulls so constructed, notably by U. S. Plywood Co. and Skaneateles, were in widespread use. Postwar, it will find a still broader use, such as in the construction of cabin trunks integral with the decks and complete one-piece houses — yes, streamlined. Nor will its use be confined to the smaller craft, as witness the 36 foot racing sloop designed by Billy Luders and molded in the autoclaves of Dick Breed's Allied Aviation.

Morris Rosenfeld

T. W. Russell's "Savage," one of the popular Rhodes "27s." She is an auxiliary of a size that many yachtsmen prefer. Initial price and cost of maintenance are moderate

Experiments are now being made, with every indication of success, in the use of molded plywood for spars and you may expect to see them on small boats immediately after full scale boat production is resumed. They will be attractive and rigid and will save weight where it will do the most good. On some smaller classes shrouds probably will be eliminated entirely.

Still another method being developed will produce one piece hulls, especially suited to small boats such as dinghies. This consists of compressing a thick blanket of impregnated manila fibers and rope yarns into a thin hull. Such material should withstand any reasonable amount of abuse and produce a thoroughly satisfactory job.

A form of construction basically similar to molded plywood that is under way at the present time utilizes layers of toughly woven canvas impregnated with glue and stretched over a mold either in sheets or overlapping strips. Thus built up to the requisite thickness, the resulting hull should be light and particu-

(Continued on page 130)

The postwar cruiser may look much the same. Here are two smart prewar boats which are as modern as tomorrow. Above, "Gretchen 111," a 40-foot Chris-Craft, and left, "Do-Ho," an Elco 57-footer

INDIAN SUMMER CRUISE

Los Angeles to Seattle in the Schooner "Renegade"

By SCHUYLER M. HUNT

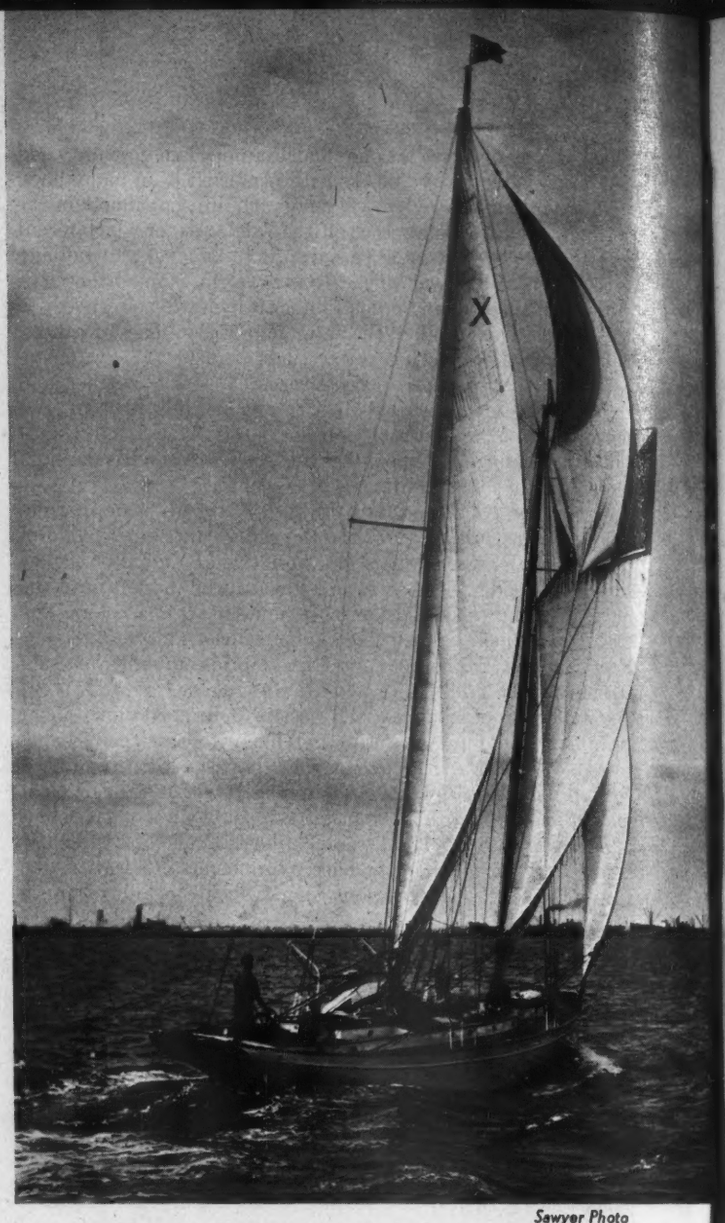
SEPTEMBER on the Pacific Coast is one of the finest months for sailing. The days are calm and warm and the winds are light and rather irregular. It is a time to forget the effort of racing and settle down to enjoy long, leisurely sails with swimming parties and pienics. Offshore sailing is particularly enjoyable under such conditions. But there are few conditions nowadays in which the authorities will grant permission to sail offshore and, when an opportunity arose for taking a 57-foot schooner the thousand-odd miles from Los Angeles to Seattle, many harbor-bound yachtsmen fervently wished for free time to make the trip.

When a yacht changes hands and the new owner lives at a distant port, the Navy Department will usually grant permission for a one-way voyage to waters adjacent to the owner's home. It was in this manner that permission was obtained to sail the newly-bought schooner *Renegade* from Southern California to Puget Sound. The Port Director's office was explicit in designating the courses to be followed and also checked carefully the identification of each member of the crew. Each time we cleared port, regardless of the length of stay, we were boarded by Coast Guardsmen and thoroughly inspected, each man producing his papers and the skipper showing his orders. But there were no inconveniences due to these regulations and we received the fullest coöperation from all authorities, particularly on one occasion when we were in a great hurry to catch the ebb tide out of San Francisco Harbor.

For those who have done no Pacific Coast sailing and are not familiar with the usual conditions offshore, particularly the winds and currents, a few words of introduction should prove of interest. The coastline north from Southern California trends northwest to Cape Mendocino and then runs more northerly to Cape Flattery. The prevailing winds are northwest but there are unusual occasions, particularly in September and October, when the wind comes up from the south and southeast. The distance from Los Angeles to Cape Flattery by steamer route is about 1200 miles but, with head winds most of the time, *Renegade* sailed closer to 1600. The *Pacific Coast Pilot* lends interesting background in its remarks. "Navigation along the coast of California, Oregon and Washington presents to the mariner a problem of unusual difficulty. The courses in general are long and must be traversed during frequent periods of thick weather with the vessel subject to the action of currents whose velocity and even direction are uncertain." Warning is given of "winter gales which increase in severity, frequency and duration, and the northerly and northwesterly winds at times reach almost hurricane strength."

* * *

The story began in Los Angeles Harbor, when Seattle yachtsman Gardner Gamwell bought the schooner *Waterwagon* in the spring of 1943. He renamed her *Renegade*, had her bottom cleaned and the long, sleek hull painted Navy gray with her Coast Guard Reserve numbers in huge white letters, and made plans to sail her home in May. This is frequently a turbulent month at sea, as was later experienced. The beats to northward were long, tough pulls against head winds and rough seas. But, when the new owner and his three-man crew arrived from Seattle ready to make sail, the bad weather had not started. To the astonishment of the local yachting gentry, this cold-blooded northern group arrived equipped with a coal-burning galley stove and fifteen sacks of coal, and proceeded to rip out the efficient gas stove in the galley and install this "furnace." We



Sawyer Photo

"Renegade," ex-"Waterwagon," is a 57-foot schooner

were later to bless the foresight which prompted this change when we ran up into northern latitudes where the nights were cold and damp. A wood or coal fire burning in the galley night and day keeps the whole ship warm and snug. But in the middle of this southern heat such action was highly irregular and caused much comment.

All stores and equipment were finally secured and clearance was given on May 11th. The prescribed courses were fairly close inshore, with no long tacks out to sea, and the following excerpts from the "Remarks" column in the log describe the first part of the voyage and the difficulties experienced. In following the course on the chart it is interesting to note that most of the trouble was caused by having to stay inside of the three Channel Islands between Los Angeles and Point Conception. The northwest wind blew so hard it was necessary to reduce to storm trysails, which are far from efficient to windward. On the port tack, *Renegade* was heading into the ironbound California coast; on the starboard tack she was laying either onto the beach on the Channel Islands or out to sea beyond the Navy limits. Later, the Coast Guard reported winds ranging in velocity up to 70 m.p.h. during a 28-day blow at that time. The following is from the log, beginning May 11th, 1943.

"May 11th: Cleared port authorities and proceeded to sea. Carrying three lowers, jib, staysail, and main. Northwest wind, force 4, getting stronger with a nasty sea running.

"May 12th: Wind steady in NW, force 5 or stronger. Heavy seas setting us back, making little progress. Midnight: hove to under staysail on port tack. Wind blowing half gale. Cook seasick!

"May 13th: 3:00 p.m. Too close to coast for this thick weather. Decided to run for Channel Islands and find an anchorage in lee of land.

"5:00 p.m. Under staysail only. Have logged eleven miles in past two hours, terrific wind but ship gives no indication of pooping or broaching to, and steers easily. Poor cook looks worse!

"8:00 p.m. Both anchors down in 8 fathoms, rock bottom, in Bechers Bay, Santa Rosa Island. Wind shaking masts so whole ship trembles. Anchors holding. Anchor watch all night.

"May 14th: 12:00 noon. Moved to new anchorage in 4 fathoms and kelp, rocky bottom, right under a high cliff. Engineer got motor running at last. Anchor watch all night.

"May 16th: Wind strong as ever. Pilot book says bad northwesters generally moderate after three days. This one has been blowing almost a week. Anchor watch all night. Can't stay here forever. Decided to sail in morning anyway. Crew have to get home to their jobs.

"May 17th: 5:00 a.m. Wind moderating. Put out to sea.

"3:00 p.m. Wind increasing again, heavy seas making up. Taking water over bow as ship plows into sharp, steep seas. Everything in forecastle wet.

"May 18th: 1:00 a.m. Wind increasing to gale force.

"2:00 a.m. Hove to on starboard tack.

"4:00 a.m. Hove to on port tack. Ship riding well.

"7:20 p.m. Arrived San Luis Obispo. Rounded breakwater and anchored off town, six fathoms, sand bottom. Warm in harbor; crew all thawed out and peeling off clothes. All hands ashore for hot meal. No anchor watch. First rest or relaxation for entire trip.

"May 19th: 10:00 a.m. Still blowing half a gale. Decided to put to sea again. Seas short and steep, wind gusty and strong. Sky overcast, glass steady."

And so it went. This time it was decided that every effort would be made to reach San Francisco, at least, and continue the voyage later in the year. Hanging onto an anchor in an insecure harbor is almost as much strain as running through the same weather at sea and, during the ensuing days, *Renegade* proved herself able and powerful for her size. She bucked the same northwester all the way up the coast and it was a tired crew that tied up in San Francisco yacht harbor twelve days out of San Pedro. The following day, on the advice of St. Francis Yacht Club members, *Renegade* was moved across the bay to Sausalito, to the snug mooring where she lay sheltered from summer gales and tides until autumn. She survived the summer without mishap and it was planned to complete the voyage under more favorable conditions in September.

The crew for this part of the trip consisted of four Seattle men, including the owner, and two from San Francisco, making possible a more even distribution of watches. We met on board Sunday morning, September 13th, and went to work making ready for the voyage. It was a warm, sunny day, just the right chill to the air to make it bracing, and mattresses, sails and

"Renegade" had a 1600-mile passage ahead of her

spare lines were all brought on deck for a good airing. It is surprising how much work there is to do just prior to sailing; with covers to remove, sails and running gear to bend on, and stores to ferry out in the dinghy and stow away, all hands were busy far into the night. In view of the turbulent weather the last time *Renegade* had been out on the Pacific, a heavy storm trysail was lashed securely on top of the furled mainsail, just in case there was trouble awaiting us, and life-lines were run from the headstay to the main shrouds. Below decks, quantities of spare gear were being transported to Seattle in addition to a stock of ship's stores. The forecastle was completely filled with all this equipment, so four men slept in the main cabin in double decker bunks and skipper and mate occupied two berths in the comfortable little owner's stateroom aft. This was piled so full of spare sails in bulky canvas bags that they had to crawl in on hands and knees. One feature worth mentioning was the convenient position of the fixed chart case alongside the companion ladder from deck. We found that when log readings and courses were being called back and forth to the helmsman it was handy for the navigator to have charts and instruments close to the open hatch. It was midnight before we finally knocked off and turned in for a few hours' sleep. Providing everything worked out as planned, our departure would be made the following day.

Monday came in with high fog and light airs. While the skipper rushed over to San Francisco to complete clearance for our departure, all hands continued the preparations, taking aboard fuel and water and making fast all loose gear on deck. At 2:00 p.m., there was a loud hail from shore, and there was Gamwell, sailing orders and all. We got under way as soon as he was aboard, anxious to be off before anything turned up to delay us. Both harbor and outer bay were still in a familiar gray mood, with a gentle breeze from the west barely ruffling the outgoing tide. We caught the ebb nicely and proceeded according to our sailing orders to the channel marker designated by the port authorities. But this was anything but storm trysail weather and, as we turned north, setting a NW by W course, the heavy canvas was stowed and main, staysail, balloon jib and, finally, the fisherman were set. The northeasterly wind was light and we rolled easily through long swells, past Point Reyes and on up the coast. The routine of watches was set on a two-hour rotation basis between 8:00 p.m. and 10:00 the following morning, the rest of the day being "catch as catch can," with relief tricks at the wheel at odd intervals. This system was used for the entire voyage. No one had the same

Ewing Galloway

Cape Flattery Light, at the entrance to the Straits of Juan De Fuca, is a welcome beacon

watch on consecutive nights, although the order of rotation was the same except when approaching land or when conditions required an extra man on deck. Dinner that first night was quite a success but the always sore point of who was to do the cooking occupied most of the evening. The two responsible for this first dinner demanded a rotating list. The other four took a vote and elected the minority for the rest of the voyage. Being outnumbered, all they could do was wait belligerently for the first criticism.

The second day "she blew up" from the southwest, the answer to all our prayers. Sheets were started, balloon jib trimmed well aft and a small spinnaker set to port and sheeted to spill into the jib. *Renegade* fairly snored along with a white bone in her teeth, and little yawing. The seas were easy and crossed a long northwest swell. The coast line gradually fell below the horizon to the eastward, and the sound of wind and bow wave was a delight to us all. We rigged preventers on the booms and, as she slid down hill on her way to her new home, we let *Renegade* sail herself and loafed in great luxury in the cockpit. She had a soft, easy motion, with none of the jarring slaps and sharp pitches that make life miserable when bucking a sharp sea, and at no time was there the slightest creak in her hull.

The third day came in with more high fog overhead and visibility limited by haze on the horizon. The wind slacked off until the sails were barely filled but, as we still had steerageway, the engine was not started. While we were scanning the clouds and horizon for signs of wind a tiny, bewildered, wild canary circled around the ship and then fluttered on board, too tired to be afraid. We filled a jar top with water and broke out some cracker meal, making comments about inadequate provisioning of the ship — no bird seed! Gradually the little fellow revived to the point where he was able to fly around inside the cabin, perching on our shoulders and on various fixtures. We built a nest for him in an old yachting cap and put him up close to the overhead in the main cabin. Next morning, however, when we looked in his nest, we found he had died during the night. He was given a fitting burial at sea with services conducted by the captain.

That night our prayers for wind were answered and a brisk southwester came up, sending us flying northward. The water foamed along *Renegade's* sides and all canvas was full and drawing as we ran steadily through long northwest swells, the log clocking a steady six knots hour after hour. Even in the "graveyard" watch the air was not unpleasantly cold, and the San Francisco crew members gloated over the "wind from sunny California." Day came in with high broken clouds which were rapidly dissipated and it turned into such a beautiful day that we broke out buckets of fresh water for shaving and salt water for baths. The transformation was astounding — it was necessary to look twice to recognize a shipmate.

We were off Trinidad Head and Eureka that afternoon and the lookout spotted a school of tuna leaping and rolling through the water ahead of us. In the far distance and almost below the eastern horizon we could make out the northern California coast basking in autumn sunlight. This fine day was too much for the cook. Something special was needed and so, acting on this inspiration, he stirred up a batch of muffins. They failed to rise as expected, however, and were saved for bird food until several days later when we were becalmed for an afternoon. Several unsuspecting gooney birds landed near us and paddled hungrily over, eagerly diving for each biscuit as we tossed them over the side. When last seen, two of the goonies had nearly foundered and the others looked at the cook with glittering eyes as they vainly tried to get off the water.

The same two-hour night watches were continued for the entire trip, with each man on the list progressing each successive night to the preceding watch. In this way the tricks at the wheel were evenly distributed. The nights were not particularly cold, thanks to the fine southwest wind, and we sat up near the bow and watched the long phosphorescent trails of porpoise as they rushed along through the dark water ahead. On the fifth day, our southwester went light with a high fog and a long greasy swell. One of our crew had to be at work the following day and we had planned on putting in under Yaquina Head, but the wind going light made it necessary to put into Reedsport, Oregon, over the Umpqua River bar. The *Coast Pilot's* advice regarding the dangers of the river bars along this coast was borne out here. The swells were moderate on this particular day, but the water shoaled rapidly to twelve feet before we could turn back. Once over the bar, the water deepened quickly to 25 feet and we were soon out of the effect of the rollers. The Coast Guardsman we met inside the entrance remarked that this was about as smooth as the bar ever got and that the water generally was breaking. With the motor and lead both working hard, we felt our way up a rather tortuous channel through the small bay and up the river. We passed close by sand dunes on one side and a shore with trees growing right down to high water level on the other, country typical of the northern Pacific Coast. Winding upstream, we could smell the scent of pines and freshly cut lumber from the mill.

A tiny fishing settlement which sent its boats over the hazardous bar we had just crossed nestled deep in the pine woods on the river bank. Reedsport consisted of a sawmill and several stores catering to fishermen and mill workers and filled our needs adequately as regards ice, fresh milk and groceries and meat. We were all anxious to cross "that damned bar" again as soon as possible; if it should blow up while we were inside, we might have to remain a long time. So we spent as little time in the town as possible, catching the ebb late in the afternoon and crossing the bar without difficulty although it was beginning to break with the change of tide.

The breeze was still light when we put out of Reedsport but freshened after midnight and high black clouds were scudding across the moon. Next day began an interval of the most perfect sailing anyone could desire. The prevailing northwesterly came in strong and steady and with weight behind it. We tacked offshore and *Renegade* boiled along doing a steady six knots day and night. The ship carried her three lowers and the fisherman in this breeze and smoked along with the lee rail under a smother of foam. She must have been a magnificent sight to the few lonely tuna and salmon

(Continued on page 132)

Ewing Galloway

Some of the local fleet on Puget Sound, that magnificent waterway on which "the last day's sail proved to be a superb climax to the entire voyage."

THE VOYAGE OF THE SCHOONER "DOLPHIN"

A Mutiny and the Rescue of Its Survivors

By CHESTER SCOTT HOWLAND

THE PRESENT war period is not the first time that dramatic action involving American adventurers has occurred in waters that cradle the Gilbert and Marshall Archipelago. One hundred years ago, Nantucket seamen pushed their bluff bowed whaleships through these seas, frequently sailing over uncharted areas and landing where white men had never been seen. Many of the islands now reverberating under the terrific bombardment of our great naval guns were visited in these earlier days by intrepid American sailors who desperately sought release from the monotony of crowded forecastles and here, a century ago, culminated the ghastly events in the grewsome voyage of the whaleship *Globe*.

This had such grave implications that in 1825 the Secretary of the Navy directed Commodore Hull, then commanding the Pacific Ocean Squadron, to dispatch the U. S. schooner *Dolphin* under the command of Lt. "Mad Jack" Percival to visit the islands in search of the ship's crew.

The *Globe*, owned by R. T. Mitchell and Company of Nantucket, sailed from Edgartown, Mass. on December 15th, 1822. Captain Thomas Worth, of Edgartown, was master and the crew list shows the following names.

William Beetle (mate)	Gilbert Smith (boat steerer)
John Lumbard (2d mate)	Samuel B. Comstock (boat steerer)
Nathaniel Fisher (3d mate)	Stephen Kidder (seaman)
Peter C. Kidder (seaman)	Jeremiah Ingham (seaman)
Columbus Worth (seaman)	Joseph Ignasius Prass (seaman)
Rowland Jones (seaman)	Cyrus M. Hussey (cooper)
John Cleveland (seaman)	Rowland Coffin (cooper)
Constant Lewis (seaman)	George Comstock (seaman)
Holden Henman (seaman)	William Lay (seaman)

The log shows that the Cape Verde Islands bore 25 miles southwest on January 9th, 1823, and that on the 17th the ship crossed the equator. Late in February, the Falkland Islands were raised and passed some distance offshore. On March 5th, Cape Horn was doubled and a passage shaped to the Sandwich Islands. Hawaii was sighted May 1st and natives came to the ship in canoes loaded with potatoes, sugar cane, yams, coconuts, bananas and fish. Forty-eight hours were spent in trading with the Sandwich Islanders and then the *Globe* sailed away for a whaling cruise in the Japan Seas. Six months later, she returned to Oahu with 550 barrels of oil. Vegetables and fruit were taken aboard at Oahu and six members of the crew deserted. Six nondescript characters, who a month later were involved in mutiny, were hurriedly signed on and the vessel then ran a few degrees south of the equator. After a short stay on these whaling grounds she returned north and lay off Fannings Island in Lat. 3° 48″ N., Long. 158° 29″ W. The ship continued to cruise for whales and made no attempt to land.

On January 22nd, 1824, about an hour after sunup, a sail was reported from the foremasthead lookout.

She proved to be the whaleship *Lyra*, out of New Bedford. Captain Worth set signal flags inviting the *Lyra's* master to come aboard for a gam. As soon as the vessels closed, both ships backed their main yards and Captain Joy of the *Lyra* was soon climbing over the *Globe's* rail. He spent the greater part of the day aboard during which time the chronometers of both vessels were checked, and latitude and longitude verified. Whaleship captains often made agreements of honor to sail "in company." By such agreements they cruised for several days within easy sight of each other and, if whales were captured, divided the oil.

Captain Joy remained for supper with Captain Worth and at

The whaleship "Globe," as she appeared off Mulgrave Island, February 11th, 1824. From a contemporary print

the table it was arranged that, when the *Globe* tacked at midnight, a lantern would be shown from the head of the mainmast as a signal for the *Lyra* to tack also. This maneuver would keep the vessels together during the night. Just before dark, Captain Joy went over the side to be rowed to his ship and his last words to Captain Worth were, "We shall be watching for your signal at midnight, Captain."

"Right," Captain Worth called back. "If we tack together, daylight should find us not far apart. Mr. Comstock, the chief mate's harpooner, will be in charge of our mid watch and I shall give him proper instructions. Good night to you and 'greasy luck' tomorrow for us both."

Captain Joy reported seeing the masthead signal light at midnight, but contrary to the plans to "cruise in company," the *Globe* could not be "raised" the next morning. Nothing more was known of the *Globe* until five months later when a French man-of-war, off the coast of Chile, sighted and boarded a crippled vessel laboring under short sail and with a reduced crew. She had sailed 3000 miles across the Pacific Ocean over a course studded with islands, rocks and reefs and where strong and variable currents were frequent. There were no navigating instruments aboard and the seamen had directed their passage by the stars and prevailing winds.

The ship was the *Globe*, under command of Gilbert Smith, harpooner. Captain Worth and thirteen other members of the original crew were missing. The French frigate took the *Globe* into Valparaiso and held the American seamen in irons, subject to the orders of Michael Hogan, American Consul.

In a few days, harpooner Smith appeared before Consul Hogan and explained the incriminating circumstances reported by the officers of the French man-of-war. Briefly rehearsing the cruise of the *Globe* from Edgartown around the Horn and into the Pacific, he declared that Samuel Comstock, whose name appears on the crew list as a harpooner and to whom Captain Worth had referred as heading the middle watch, attacked and killed all the ship's officers and took command of the vessel a few hours after Captain Joy, of the *Lyra*, had left for his ship.

His first act immediately following the mutiny was to call all hands aft. It was nearly twelve o'clock. The sky was overcast by heavy clouds and the sea was black about the ship. Comstock, gory with the blood of four men, nervously screamed out his orders.

"Listen to me," he said, "I am in possession of the ship. We are now going to shape our course for the Gilbert and Marshall Islands. Some of us may pick out a spot and settle there for life. But we shall take care of that matter at the proper time. What we shall do about those of you who don't want to do as we do we'll attend to later, too. If any one of you sees a sail and does not report it or if any one of you refuses to fight a ship, you shall be bound hand and foot and thrown into the try pots filled with hot oil. I mean to enforce this rule. Each one come forward now and acknowledge this order. If you cannot write, Smith here will sign your name and you can make your cross. Come along, beginning with the harpooners."

The ship was silent as the men signed this agreement. Before the disheveled crew had finished with their signatures, "eight bells" was faintly heard coming over the water, well off the port beam. Comstock remembered the light agreed upon by the two captains to be set as a midnight signal. He ordered it shown at once. The *Lyra* tacked ship but the command aboard the *Globe* was: "Shake out all the reefs, set the main to'gallant and keep her as she is." Comstock had no wish for the *Lyra* to be in sight the next day. The vessels began to separate and were a long distance apart when morning came. Comstock's further orders were: "You at the wheel, keep the ship heading a point north of west. The Marshalls lie somewhere west of our present position." The ship bowled along in fair weather.

Harpooner Smith continued his tale before the Consul by telling of the landing on one of the Gilbert and Marshall Island groups and concluded with the story of his escape with the ship.

"Comstock and the mutineers set up a crude camp ashore and planned to burn the vessel after they had stripped her. Most of the ship's company remained ashore each night, but six of us were ordered to remain aboard to work the ship in case of a sudden blow and to keep the natives from stealing. It was my intention from the night of the mutiny to get possession of the vessel and bring her to port, if possible. I talked the matter over with my shipmates who were as anxious as I was to escape.

"At seven o'clock the night of February 17th, 1824, we hurriedly made preparations. In an hour and a half, the moon would be rising so I went below to search for weapons to beat off the mutineers if they attempted to board us. The others, as silently as possible, cleared the running rigging, for everything aboard was in confusion. I found one musket, three bayonets, and some whale lances below and distributed them. A well greased handsaw was laid upon the windlass to saw off the cable, and the only remaining hatchet on board was placed by the mizzenmast, to cut the stern moorings when the ship swung off. Taking one man with me, I went to the fore topsail yard, loosed the sail and shook out the reefs; two others loosed the main-topsail and mainsail and came down to the deck. I stationed one of these at the helm and sent the other to the fore tack with the man who had been aloft with me. The foresail and the foretop-sail were still held aloft by their gaskets and I sent two men to the yards to "let fall" quickly when I gave the word.

"It was half past nine o'clock when I took the handsaw and cut the cable. The ship paid off at once and, when her head was well off the land, I ordered the stern hawser cut and all the sail we could make quickly set. A strong wind was blowing seaward and, as soon as we had cut adrift a raft which was towing alongside, the vessel immediately made good headway.

"We were ill equipped to sail across an ocean but, in spite of all hazards, there was greater promise of safety aboard the vessel than upon the savage islands which were slowly passing out of sight into the night behind us.

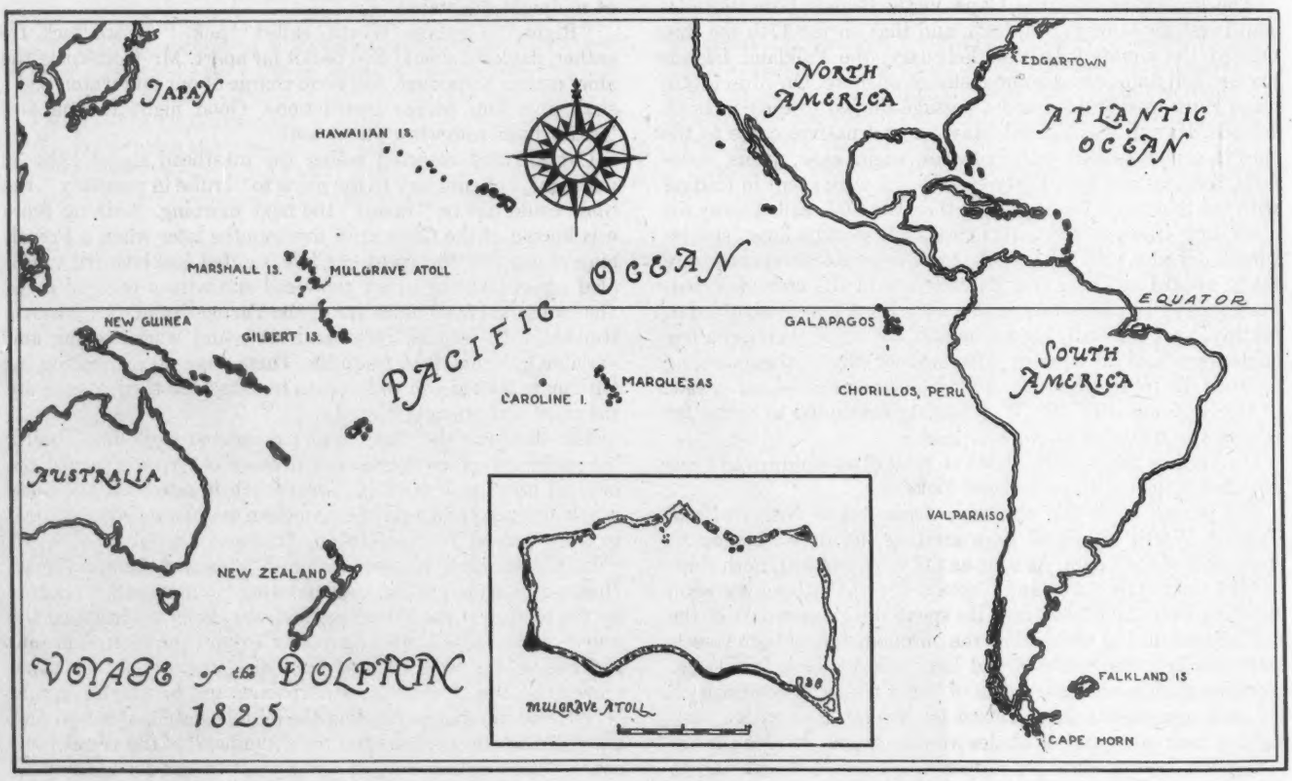
"Without instruments, we kept an easterly course by the sun and stars, knowing that, if we escaped reefs, we would finally reach some portion of the west coast of South America. We passed through hard blows but escaped being driven off our general course. On the 118th day of our passage, we were sighted, boarded and brought into this port."

Consul Hogan accepted Smith's testimony and made arrangements to send the *Globe* back to America.

Captain Eddison, of the ship *Belle*, brought the first news of the fate of Captain Worth and his officers to Edgartown when he arrived there the later part of October, 1824. A month later, the *Globe*, under the command of a naval officer named King, arrived in Nantucket.

In the meantime, however, the Consul's office had reported

After the mutiny, the crew of the "Globe" sailed for the Marshall Islands, where they made a landfall on Mulgrave Atoll



Samuel Comstock, one of the "Globe's" harpooners, kills the second mate. From a contemporary print

the testimony of Gilbert Smith to Washington and Commodore Hull was subsequently instructed to dispatch the U. S. schooner *Dolphin* on her fact-finding mission, to apprehend the mutineers and rescue any other of the crew who had survived. Lt. Hiram Paulding, second in command of the *Dolphin*, reported the cruise, in part, as follows:

"On the 18th of August in the year 1825 the *Dolphin* sailed from Chorillos, on the coast of Peru, under the command of Lt. John Percival. Authorized to recruit the vessel at whatever islands we might touch, we began to resail westward the long passage of the *Globe* across the Pacific Ocean to Mulgrave Atoll. Before sailing, we received a long list of islands discovered by whalemen; islands any one of which might serve as an emergency landing spot and many of which might not be noted on our government-issued charts. On September 2nd, we set our course from Peyle Island to the Gallopages (*sic*) group, and at Hoods and Charles Islands obtained a large quantity of turtles. On the 12th of that month we raised the Marquesas and remained there until October 5th.

"Caroline Island was touched on the 10th of October and on the 30th we sighted the Duke of York group. We were now approaching Mulgrave Atoll which was our point of supreme interest. Mulgrave Atoll is a large ring of coral-based islands extending from 5° 09′ to 6° 20′ N. and from 171° 55′ to 172° 40′ E. It lies within the borders of the extensive Gilbert and Marshall group.

"November 8th and 9th we closed Drummond and Byron islands and intended to explore both of them and replenish our water supply but we found the natives too numerous and too unfriendly to risk sending in a landing party, so we lay off and on for several hours and toward evening made sail. After we had cleared the land, we hauled up to the northward and westward on a direct course to Mulgrave.

"During our passage from Drummond's Island to Mulgrave we had squally weather and were constantly affected by violent currents. On the second day after our departure, the weather was thick and squally and we stretched off, calculating that at meridian on the following day we should be 30 miles to the northward of the Kingsmill chain of islands. But, to our surprise, when at meridian the weather cleared and we got our observations, instead of being 30 miles to the northward, we were as much to the south, having been carried through the islands by a current at night. We were two or three days in the vicinity of Mulgrave, lying-to at night and drifting with the current nearly as much as we advanced through the day with light and baffling winds.

"On the evening of November 19th, the welcome hail of 'Land ho!' was given and shortly afterwards it was seen from the deck. It proved to be the easternmost end of Mulgrave. We ran down on the following morning and anchored on the lee shore, within less than a cable's length of the surf, in six fathoms of water.

"The island was low, of coral formation, and in all respects resembled Caroline, Clarence, York, Byron's and Drummond's islands. The inhabitants were not numerous and differed from all we had seen before in dress and manners. Near our landing place, which was good, we found two or three old wells of water.

"On the 21st and 22nd, we filled our water casks and, with several parties, explored the island. In our search, we found a whaler's lance and several pieces of old canvas. Some of the natives came on board and appeared to be intelligent but, whenever the subject of our visit was pressed upon them by pointing to the whaler's lance, they became silent, pretending to be ignorant of our meaning.

"Beyond us, to the south and west, was a range of islets as far as we could see from the masthead. Having thoroughly explored this island and completed our watering, we determined to proceed in that direction.

"The first land we approached was a narrow islet, made up of dry reefs, from one to two miles long, and 200 yards wide.

"A small canoe came off, paddled by one man, who ventured on board, looked around for a few minutes and then dove overboard. We suspected him of being a spy, and afterwards learned he was sent by the principal chief of all the atoll."

The *Dolphin* coasted along the islands and entered an inland sea of great extent. Two large canoes were seen coming from a distant island under sail. They landed not far from the schooner on a small islet where four other canoes already were beached.

"We lowered one of our boats and cautiously went ashore to find that the high chief of Mulgrave, with 50 to 100 of his warriors, had come to find out who we were and why we had visited his lonely islands. The natives watched us angrily as some of our men pointed to the lids of sea chests and ash spars discovered in several of the canoes, but they stared vacantly when we asked questions.

"Towards sundown we came on board for the night and the natives, getting into their canoes, took their departure from the islet, and steered away over the inland sea, until they were lost on the horizon. We stood off and on during the night and, at nine in the morning, anchored in nine fathoms, near our place of landing. We felt from the conduct of the natives that they were unwilling to give us the intelligence we required, and that we must depend entirely upon our industry and good fortune for any discovery we might make.

"In the course of the day we found a mitten, with the name of Rowland Coffin on it. Coffin was one of the boys left on the islands with the mutineers when the *Globe* sailed away.

"The next morning a squall arose from the eastward which struck the vessel adrift in the direction of the trending of the land and, dragging off the bank, we hove the anchor up and stood alongshore to the westward.

"At 3:00 p.m. we came to under a point by which we were somewhat protected from the sea, in ten fathoms and about 30 fathoms from the coral rocks. We were determined to explore the whole circle of islets if information of the mutineers should not be obtained sooner. In front of us the islet was wider than any we had seen elsewhere, and forests of coconut and breadfruit trees indicated a luxuriant growth. Huts were scattered about through the trees. As far as we could see to the westward, the land still continued.

"On November 28th, we continued on to the northward and

(Continued on page 138)

The upswing in inland boating has been building up like a summer thunder-squall. Jackson Lake Reservoir, in the Teton Mountains of Wyoming, is an inland waterway of breath-taking beauty

THE LURE OF THE INLAND WATERWAYS

In Nearly All of the Forty-eight States Are Natural and Man-made Waterways Which Are Being Developed for Tomorrow's Yachtsmen

By EDWARD FALES

THERE'S a rumor down in Oklahoma these days that the cowboys have sold their ponies and are herding cattle in motor boats. And, in Iowa, farmers are looking for sails while far out in the Rockies, postwar orders for cruisers on at least one lake call for large, tough craft, able to ride the high seas that come rolling down between the mountains.

For yachting, as everything else in modern times, seems heading for breath-taking changes. And perhaps the greatest change of all stems from the tremendous upswing of *inland* boating — an upswing which has been building up like a summer thunder-squall and will reach its real stride in the first years just after the war. Many of us seacoast sailors have been thinking of what the future may mean for seacoast yachting. But we may have been overlooking one angle; a whale of a change, and for yachtsmen a most agreeable one, has been taking place in the countenance of our land. From coast to coast, literally dozens of new lakes have been created — many of them large and navigable. In fact, in some inland states, every time you turn around a few more square miles of waste land or desert land or marginal farms have been covered by sparkling cool, blue water.

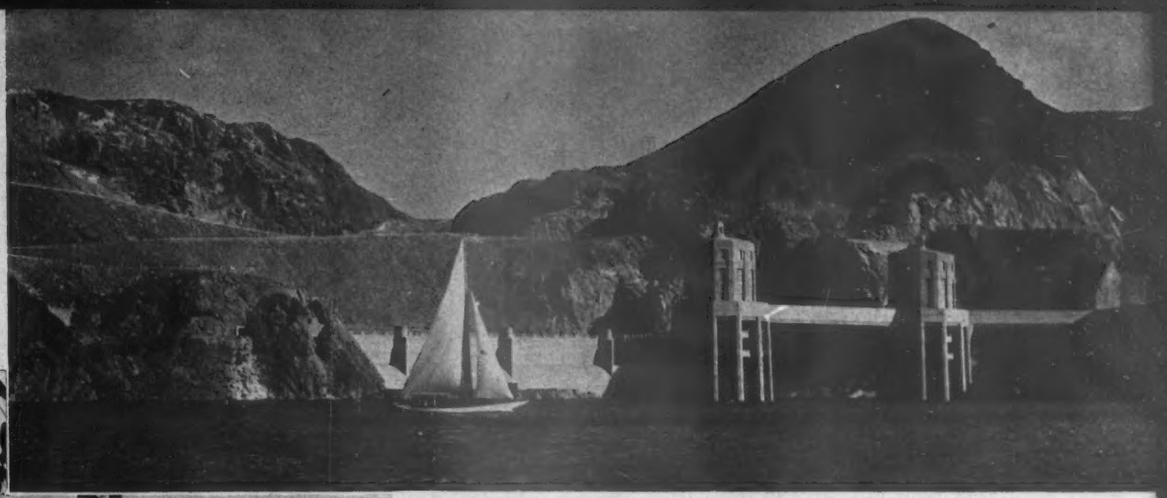
Some of it is the result of private effort, such as beautiful Candlewood Lake, which has 30 miles of cruising channels back in the Connecticut hills. Candlewood grew up behind a power company's dam and is now one of the granddads among our artificial lakes, having attained the hoary old age of sixteen years. And down in Missouri is another little pond built by a power company, Lake of the Ozarks, which has 129 miles of main channel one-half to three miles wide *and a shore line equal to the cruising distance from Massachusetts to Florida!*

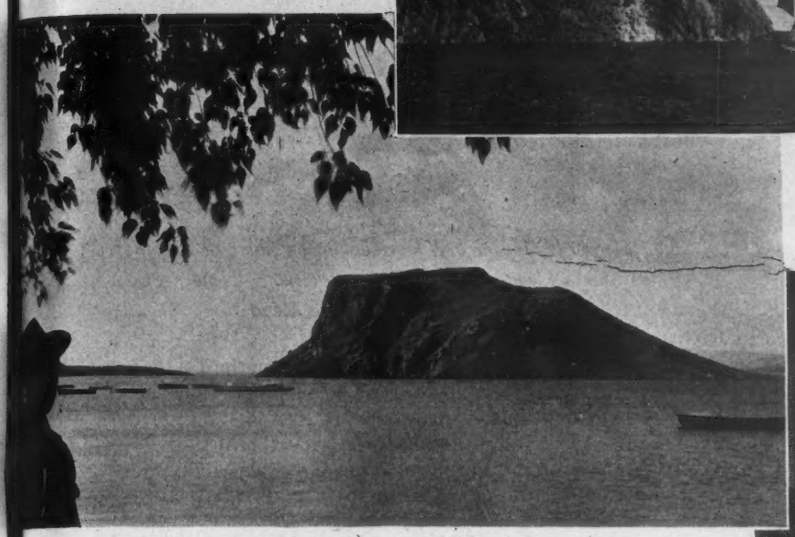
Some of the new lakes have been built by federal agencies, such as TVA, which is building the 25 new "Great Lakes of the South." Some lakes are being built by states and some by farmers. And, to top it all off, there is still a vast program of lakes yet to be built, especially if the proposed Arkansas Valley and Missouri Valley authorities get the hoped for green light.

A moonlight sail on the Columbia River Reservoir

Photographs from Arkansas State Publicity Department, Tennessee Valley Authority, National Park Service, Bureau of Reclamation, Coeur d'Alene Chamber of Commerce

Right, an 8-Metre on Lake Mead above Boulder Dam. Below, Elephant Butte on the Rio Grande River, New Mexico. These scenes are typical of the many and sometimes "undiscovered" inland waterways of the nation



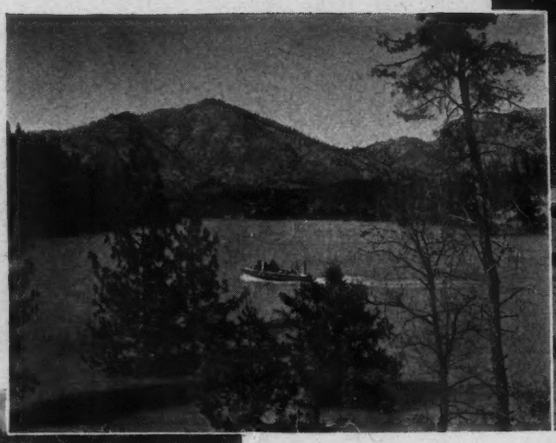


Below, cruising through Boulder Canyon on the Colorado River. The majesty of the scenery of these newly developed lakes and rivers will come as a revelation to the coastal yachtsman

Below, a "brush" on Lake Coeur d'Alene, Idaho. This beautiful lake is becoming a mecca for yachtsmen and fishermen from miles around

Below, a flotilla of yachts from Chattanooga arrives at Guntersville, Alabama. Seventy-mile-long Guntersville Lake, a part of the 900-mile-long Tennessee Valley Authority chain, will soon boast of many harbor developments

There are new lakes now as large and larger than Long Island Sound. There are chains of lakes through which one can cruise for days. There are small lakes and ponds by the thousands — and I mean *thousands!* Did someone say: "Sure, but you can't float a cruiser or sail a triangular course on a farmer's fishpond"? Sure, you can't but those little ponds are important and some of them run to pretty good size. Those are the little fellows which will have the vital effect



Left, the "pleasures of yachting" — deep in the heart of Arkansas. Above, the Shasta River, a part of Shasta Reservoir. Center, a boat landing on Boulder Dam's Lake Mead

of putting oars and outboard motors into the hands of thousands of Americans for the first time. Certainly many of these neophytes will soon be looking to the larger lakes growing up near-by, and will become full-fledged boat owners before long.

To all of which we can add the growing possibilities in river navigation. Improvement of the Mississippi has produced a spurt in sailing near Minneapolis and St. Paul. The Hudson River, on which there were few sail boats ten years ago, is lined with them from New York to Albany — a distance of 140 miles. The Tennessee River and tributaries now offer you limitless cruising possibilities.

All of this inland development is important, of course, to inland recreation seekers and to the boat and motor builders and distributors who will capitalize in various degrees on the new markets. (Tennessee expects to have 20,000 boats of all sorts within the next ten years.) But it's important, too, to the seacoast sailors. Some owners of small craft will transport them overland by truck or trailer at the end of the seacoast season. There's a company in Detroit which specializes in boat-trucking. Others will maintain boats in their home waters and on the lakes. Still others will take a cue from the yachtsmen who cruise to Florida each winter and will plan fall cruises by river and canal to inland winter sailing grounds.

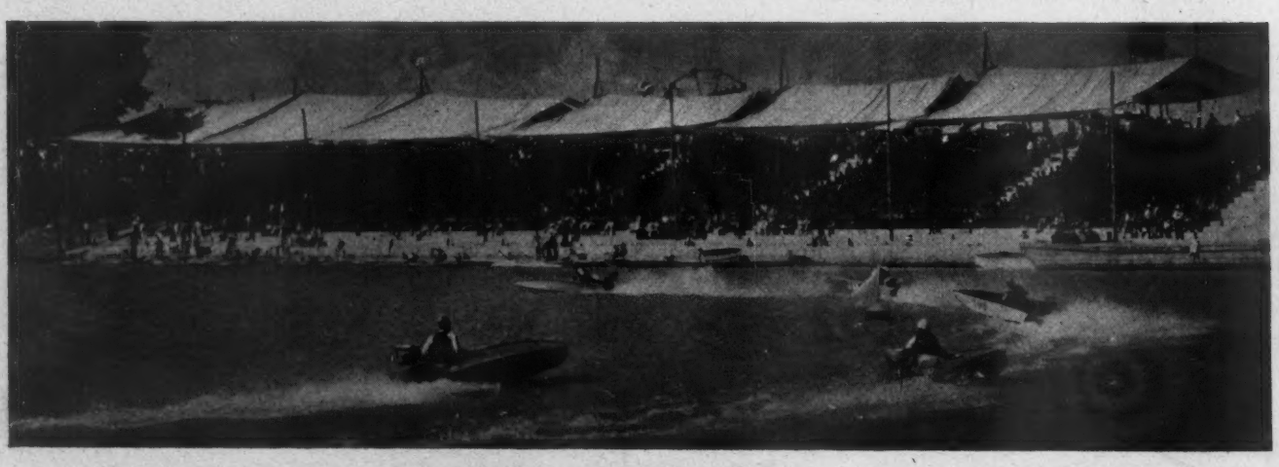
Nor is all this idle speculation. Resort owners in the Tennessee Valley, especially, are banking heavily on such part-time activity by men who regularly maintain boats at distant points. Some of the large lakes in the southwestern states already have fleets of cruisers owned by business men who live many miles away in St. Louis, Kansas City, and other midwestern cities.

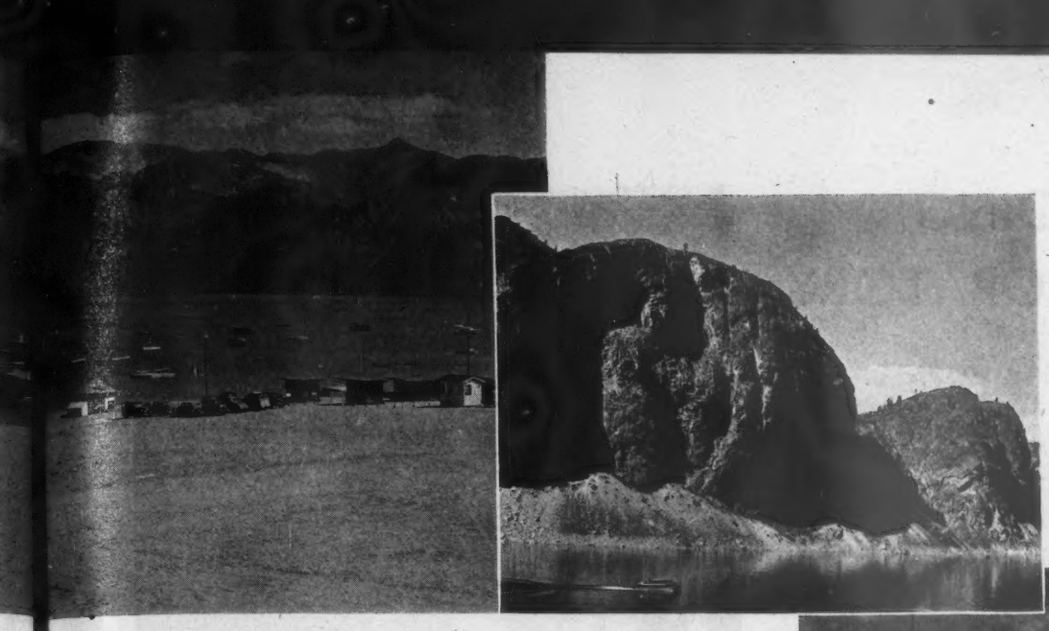
The fellow who likes his sailing rugged will find it rugged enough on any large inland lake, such as, perhaps, Lake Chelan, Washington. Chelan is a natural lake, 60 miles long, and as temperamental as it is scenically gorgeous. Nor is it any lake for a mild-weather sailor. Rip-snorting winds throw steep seas at you with little advance notice. Local boat dealers already hold about $100,000 worth of "future delivery" orders — and most of them are for strongly-built cruisers of 30 feet and over. It takes cruisers of that length to weather Chelan's stormy weather chop.

Or consider Lake Oneida, one of the large lakes in New York State. The Barge Canal crosses Lake Oneida and skippers of towboats and commercial ships have a healthy respect for what Oneida can do in heavy weather. Afternoon thunder squalls are a menace on any inland lake. The TVA waterways have safe harbors, at regular intervals, for shelter against sudden storms. Thirty-mile-long Sacandaga Reservoir, in upper New York State, an example of a flood-control development built by a state authority, can be tough going when a black squall roars down from the west across the lower Adirondacks.

But there's plenty of fine cruising for the fellow who, like yours truly, is capable of standing up to the strain of a long spell of fine weather with moderate breezes. Let's suppose, for example, that you are one of these lads and you find yourself, a couple of years after the war, at the helm of a snug little auxiliary cruiser on Caddo, the 40-mile-long lake which used to be

"The White River Carnival" — Arkansas' annual outboard classic held at Batesville, deep in the Ozarks





Above, right, excursion boat "Miss Coulee" on the Columbia River Reservoir, Grand Coulee Dam. Right, part of the "Longhorn Fleet" of Fort Worth Boat Club, Eagle Mountain Lake, Texas

an oil field in Texas and Louisiana; or on great Lake Texoma on the Texas-Oklahoma border, which was filled just last year; or the new Norfolk Reservoir, 40 miles long, now being built in Arkansas; or Shasta Lake, in California; or Lake Winnipesaukee, New Hampshire. Or, perhaps, we can make it one of the TVA lakes. You take a bearing on the windmill on Joe Baldwin's farm. It's an hour after sundown but the sky still glows clearly. With running lights burning, you find the channel that leads back of the islands on the other side of the lake — a lake that didn't exist two years ago. Five miles ahead, a light blinks brightly on the side of a low mountain. When you have run off the five miles you turn to port and pull into a little cove. The chart shows a shallow beach but over on the west side there is a good depth right up to the shore. And so you anchor only a few yards off. If you choose, you can even tie her up to that tree over there.

Outside, there's a lively southwest breeze but in here there's no surge or swell at all. There's no tide to worry you. The moon comes up over the pines, and you hear a loud slap on the water nearby. A beaver was looking you over. In the morning, with three fine small-mouth bass in the cockpit, you get under way. The motor helps you out of the cove, and the fine wind from the plains to the west promises a fast reach down the lake. If you choose, you can lock through at noon and go on down the valley, through a succession of lakes, for a long cruise.

Open up your atlas and have a look at the map. But it isn't the same old map. In fact, for our purposes, you might almost say it is becoming a chart! That report about Oklahoma's cowboy-sailors wasn't entirely a joke. Time was, out on the plains, when all you heard after dark — if you believe the romanticists — was the soft lowing of cattle and the plunk of a cowboy's guitar. Now, if you listen carefully, after the cattle are all squared away for the night, there are those who swear you can hear Seth Thomas plunking out the bells in the cowboy's cabin cruiser!

But let's get back to that map.

Passing for a moment over the vast chains of lakes built for power and land reclamation in the Mid-west and South, let's do some nautical hedge-hopping straight out into the heart of the farm country: Iowa. In Iowa, incidentally, *nearly 3,000 motor boats are registered with the State!* On Clear Lake (seven miles long), the Clear Lake Yacht Club sailing fleet consists of 38 boats; if more were available, Past Commodore H. H. Crane says: "The racing fleets would be at least twice the size." Iowa has 65 natural and 18 artificial lakes, some of which are large enough for cruisers. "We expect greater use, after the war, of cruisers on our lakes," says Verne H. Peterson, State Boat Inspector, who adds an observation which is singular evidence of what mid-westerners are looking for after the war: "What a grand idea to return to the job on Monday morning, toned up to sail into the week's work, as a result of a week-end afloat."

That from Iowa!

With Iowa, then, as a point of departure, let's close reach up to the Pacific Nor'west, then swing around the nation. In Washington (where there are 32 lakes, old and new), lies the huge new Columbia River Reservoir which has grown up behind Grand Coulee Dam. Here's a watercourse with tremendous boating possibilities — for it reaches 151 miles to the Canadian border and connects with Canada's Arrow Lakes.

Idaho has Lake Pend d'Oreille which, with 500 miles of scenic shoreline, boasts of having "more high grade yachts and cruisers than perhaps any point on the Pacific Coast." Many, right

(Continued on page 164)

Competition for the Thomas Lipton Cup on Grand Lake in the Rocky Mountain National Park

A SEAGOING TESTING LABORATORY

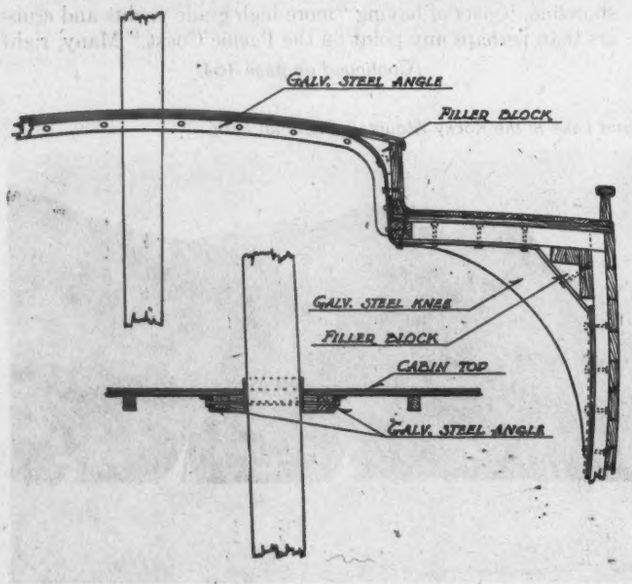
Part III — Decks, Cabin Trunks, Skylights and Hatches

By GILBERT DUNHAM, *Chief Boatswain, USCGR*

THE OLD argument about trunk cabin construction versus flush deck has been going on for years and years but I don't really see that there is much material for debate. Either method can be satisfactory if well engineered. Generally speaking, the hulls of boats in this patrol fleet have stood up amazingly well but decks and deck structures show to a disadvantage by comparison. However, *some* flush decks and *some* cabin trunks have proved as good as the hulls, which is pretty conclusive evidence that it can be done. That statement can be amended on one count. *All* of the decks leak more or less and have continued to leak for more than two years, regardless of corrective measures taken. I might add that, in my opinion, it won't be many years before planked and caulked decks on small to moderate sized pleasure boats will be a memory as far as most of the new construction is concerned. Nobody cares too much if the hull isn't quite tight but a leaking deck can give you a pain in the neck — literally.

The majority of our boats are of the flush deck type but they all have some kind of a deckhouse, either a short, low trunk aft or a sunken doghouse and, in some cases, a sunken deckhouse amidships. Where these houses are short and take up little deck space, we've had almost no trouble with them from the standpoint of construction — except that most of them leak where they join the deck — but on boats designed with long trunk cabins it's been a different story. There have been, however, two notable exceptions. It is because of them and the steps we have taken to doctor ailing trunks in general that I feel justified in saying that trunk cabins *can* be designed and built to be as good as the hulls.

Putting aside for a moment the matter of that all-important joint between house and deck, I can say there has been one common fault with cabin trunks, they just haven't been strong enough. This weakness of structure is particularly noticeable where cabin top beams join the cabin sides — not only in way of the mast, which may go through the trunk, but for three-quarters of its entire length. It is manifested by a general flattening of the cabin top and a corresponding bulging out of the sides.



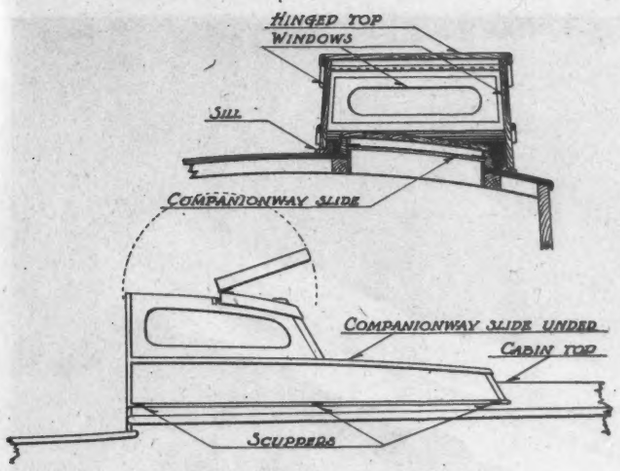
Cabin trunk and deck bracing in way of mast

The hulls of the boats serving in the Offshore Patrol have stood up amazingly well, but decks and deck structures show to disadvantage by comparison

Also, the situation is aggravated by a sagging of the deck itself along the side of the cabin. The solution is simple but involves some additional expense in building. To be sure, it shouldn't be an added cost but today we'll have to consider it as such. It simply calls for hanging knees of wood or metal — and plenty of them — not only opposite the mast but fitted at regular intervals throughout the entire length of the trunk. In addition to these, it would be wise to fit corresponding knees under the side decks. One reason why we've had such trouble with these trunks is because of improper caulking of the decks. They have, in some cases, been caulked too hard and have been forced somewhat out of shape as a result. This, to be sure, would not happen so easily if enough tie rods were installed. However, this doesn't alter the fact that the whole structure has been inherently weak or that such weakness is chiefly the result of a general tendency to cut corners and costs in boatbuilding.

There are several good methods of bracing a cabin at the mast partners but I'd like to mention one which has proved to be satisfactory. It calls for two steel angles which are bent to shape from a pattern and then galvanized. They are bolted to the two partner beams and extend across the cabin from one side to the other. In addition to strengthening the whole cabin top at this point they replace the usual hanging knees.

I have suggested that there might well be more hanging knees used under the side decks. To go a bit further on the subject, except the knees in way of the mast and partners I don't believe they need be large or extend from the clamp all the way to the fore and aft piece or cabin carlin. However, I am more and more drawn to the conclusion that sail boat hulls would be improved if the connection where the deck joins the topsides were strengthened. This might entail the use of a gusset or small knee at every frame for almost the entire length of the hull or, perhaps, at every other frame. Such knees could be made in several ways but with modern glues and plywood the cost of such construction should not be prohibitive. For quite small boats I doubt the wisdom of going to such lengths but with larger, seagoing racers, the benefits ought to outweigh considerations of cost. Probably, if this method is used, the deck beams will have to butt the frame heads instead of lapping them. At any rate, the whole idea would have to be carefully considered and planned. The fact remains that a good many of the boats we have had to service, boats that have taken a real beating, show a definite lack of strength at this point.



A "puppy" house, a most useful feature

Decks have caused us no end of trouble because they leak; they all leak, although we have one boat with a double deck which is almost an exception. It leaks only where it meets the covering board and around hatches and skylights. Double decks are expensive but, with the glues we have available today, it should be possible to work out something that will be really tight and trouble free. Decks with no caulking and no seam composition will be a delight. Of course, canvas covered plywood is good and it is likely that compositions are being developed which can be spread or painted over plywood as a substitute for canvas. Delving into the problem of decks and how to improve them is fascinating, to be sure, but it's a problem designers and a good many boat owners have had on their minds for years. We've just about reached the point at which rapid strides will be made but there are lots of different ideas on the subject. There will be a good deal of development work going on and lots of experiments tried but, after all, the proof of the pudding or decking is going to be in the eating and sleeping thereunder. So, as far as this article is concerned, I'm ready to let the matter rest but, in the near future (I hope), I shall be able to help make a somewhat more practical, down to earth, contribution toward the delights of cruising.

This business of making a tight joint between deck and cabin trunk or hatch falls pretty much into the same category as the foregoing. It certainly is a real problem and perhaps the harder of the two to solve but I'm sure it can be done — at least, fairly sure. Anyway, enough so that I find myself holding on to the uncomfortable end of a bet with a well-known yachtsman, conceived no doubt, in a moment of boastfulness.

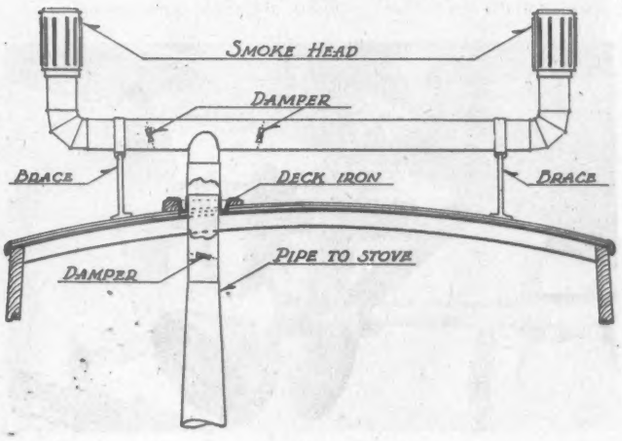
Hatches and skylights have been a never ending annoyance because of leaks. I'm speaking now of the upper or opening part and not of where they join the deck. Almost every conceivable type is represented but probably the most common is the kind that relies on a strip rubber gasket for tightness. A good portion of these (at least, the skylights) are made up in two parts — upper and lower halves as it were, which gives them three potential leaking places instead of the usual two. They leak around the edges of the glass deadlights, where the hinged top meets the sides and at the joint between upper and lower halves, to say nothing of the joint at the deck or cabin top, which is not under discussion. It all sounds pretty bad but I believe this variety of hatch or skylight *can* be made as tight as any, if not more so. In the first place, it's pretty hard to set a piece of glass into a frame so that it will stay watertight indefinitely or to be sure it won't be broken. I'd be inclined to use Lucite or Plexiglas or some other material that can be drilled to take screws. Then, instead of setting it down into a rabbet in the frame, it can be placed over the opening and fastened down around the edges with closely spaced screws which would pass through a flat rubber gasket laid between the wood and glass. Even with this type of glass, it might be well to protect it by metal or wooden bars.

The next and worst water intake is where the hinged top meets the coaming. Here there is usually a brass strip, set vertically into the upper surface of the coaming, which runs all the way around the opening and is intended to dig into a strip rubber gasket let into the top or lid. That is, when it is closed. Theoretically, this is a fine system and should make a tight connection but often doesn't — for several good reasons. The coaming is made with insufficient skill or of poorly seasoned wood, so it warps out of shape and the metal strip doesn't make a good, even contact with the gasket. The top of the skylight is not heavy or stiff enough to maintain an even pressure all around its edges when it is dogged down from below. The number of holding down dogs installed is insufficient to pull the top down evenly. This last is a common trouble. It's true that if enough dogs are used the other faults lose some of their significance but that is no excuse for their existence. The method of hinging the top is most important and is sometimes done so that dogging it down evenly all around is impossible. Here is something else that's important. All fittings or dogs for holding the top down should be bolted up through it and not fastened with screws. You can't use long enough screws in the average hatch top to hold properly.

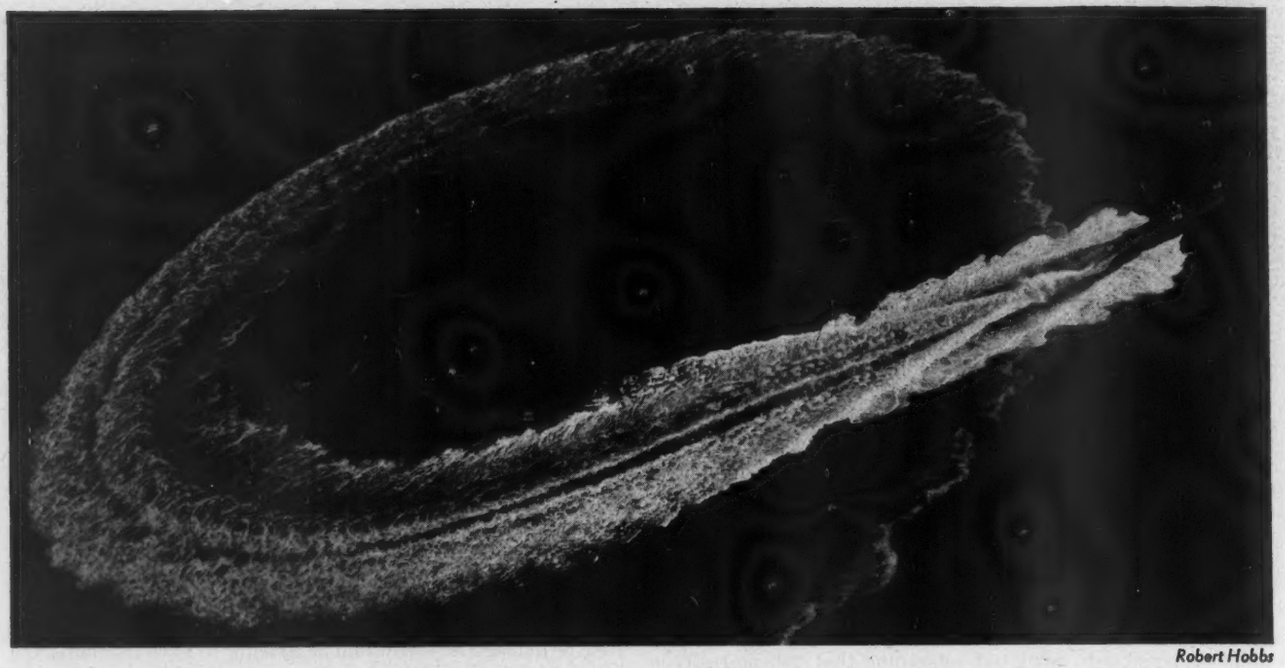
The third offender is the rabbeted joint between the upper and lower halves of the skylight. I believe it's a good idea to make them in this way because the upper part may at some time be damaged and it would be a shame to have to remove the whole business from the deck for repairs. You might break the seal — if you've been so fortunate as to achieve one at this point. The joint in question, however, can, I think, be made tight by the use of a rubber gasket and *plenty* of dogs inside.

Sliding companionway hatches have always presented something of a problem. It's pretty hard to make one absolutely tight when horizontal spray or rain is driving against it. There's apt to be a chart table just below with a chart on it or a bunk that you'd rather keep dry, and whenever anyone opens the slide the inevitable cascade makes its chilly entry into your snug (?) cabin. We have managed to overcome a good deal of such unpleasantness by installing what we call a puppy house or dog hatch (some of the fellows call them cat houses) which completely covers the entire companionway hatch without interfering with it in any way. A puppy house serves several purposes. In addition to keeping out most of the water, it enables you to leave the slide open in bad weather, unless the wind is pretty much abaft the beam, which certainly helps a lot toward preventing stuffiness below. Also, it is high enough to provide room for a comfortable seat on the top companionway step for one member of the watch and, being fitted with windows, allows him to see what's going on outside. Most of these houses are arranged so that part of the top opens on hinges and folds forward but where there hasn't been sufficient clearance under the main boom we've used sliding tops. No great effort was expended toward creating a thing of beauty because we had plenty of other things to do and couldn't spare the time but there's no reason why they can't be made so they won't detract from the looks of any cruising boat. The idea was suggested by the crew

(Continued on page 148)



Double smoke heads for the galley



Robert Hobbs

When running at high speed the water coming up from the bottom of the boat is apt to produce a "rooster tail"

SOME CONSIDERATIONS OF THE PROPELLER PROBLEM

Development in Propeller Design and Construction Leads to Improved Propulsion Efficiency

By JOHN H. WELLS

ABOUT the time Nero was fiddling a Roman rhumba, a Chinese junk builder had produced a vessel with a wooden propeller operated by pedals. Centuries later and a hundred years ago, the first screw propeller ship crossed the Atlantic. Subsequently, the development of the propeller has kept pace with the progression of hull and propulsion machinery design. Yet, though I have long been an observer of the work of wheel experts, I have yet to hear of any two who were in complete agreement about any phase of screw design or construction.

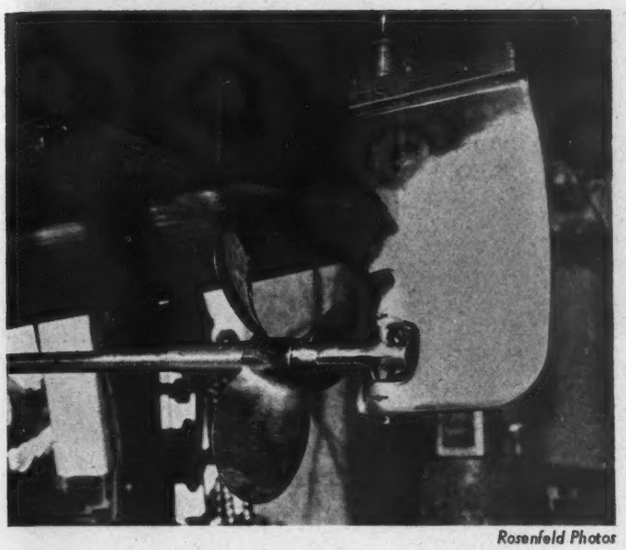
Because there is no one perfect propeller, we merely approximate the ideal condition. For example, one of the leading authorities on propeller design refuses to commercialize his work for fear that his figures might not produce a wheel of maximum efficiency, an unusual evidence of modesty in this age. Various Navy and private testing tanks have done remarkable research work, and have proved which wheels are best suited to various hull designs as a result of trials. Tables prepared by various designers have also given help in wheel selection. Of these, one by George Crouch is outstanding because of its accuracy.

Technically speaking, it is considered that the best propeller will usefully transmit about 70 per cent of the motor's power, but in everyday use the efficiency is less. In speaking of propeller power, one must consider the element of "slip." Usually, one talks in terms of apparent slip and not true slip. Apparent slip is the difference between the speed of the ship and the speed of the screw, expressed as a percentage. The speed of the screw

A coupling such as this might do on a slow boat, but not for a high speed craft. The nuts are exposed, and there is no streamlining

A good example of a stern bearing secured with hanger bolts, yet the wheel is too close to the deadwood

Rosenfeld Photos



Rosenfeld Photos

Not a practical rudder-propeller-shaft arrangement. The rudder installation is not strong enough to make a stiff bearing, nor should it be expected to perform the function of a strut. A strut should be incorporated as a bearing for both wheel and rudder

is the product of the pitch and the number of revolutions. The real slip is the velocity (relative to water at rest) of the stream of water which is projected sternward by the propeller. The efficiency of the propeller is the ratio of the useful work produced to the amount of power put into the wheel.

Years ago, Professor MacDermott, of Cornell, made the statement that no 40-foot boat could be driven over 36 miles per hour, yet he has lived to see how wrong one can be because of developments in hull and power combinations. Today there are few designers who will not agree that as a result of war experience, there will be produced boats powered by light weight motors which will achieve unheard of speeds. Even today we have high speed gas and diesel motors — yes, even small steam turbines — all with gear reductions, which produce great power with saving in weight, with less vibration and at lower cost.

With gear reduction, the designer may choose a wheel best suited to the hull form and weight of the vessel. At the same time, we are learning that certain types of hull forms can be operated at higher wheel speeds by direct drive than were previously considered possible. Years ago, if it had been prophesied that speed boats could be operated with a wheel speed of 4000–9000 r.p.m., driving the boat over 100 miles per hour, no one would have believed it.

In the high speed, low weight postwar engines it may be necessary to obtain high propeller efficiency by the use of adapters which will convert the power of the engines developed at high revolutions to thrust at lower propeller speeds. There are several types of adapters in addition to mechanical reduction gears as mentioned; among these are the hydraulic torque converter, generator-motor drive, and the Bowes drive which is an electrical torque converter. The electric and hydraulic torque converters lend themselves to a shorter overall length of the engine.

One significant result of the experience of this war is the number of medium speed direct drive Diesels, rated at from 600–900 r.p.m., which can be operated advantageously in cruising boats even though the propeller efficiency is lower. This is so because the added weight of the reduction gear, which sometimes equals half the weight of the motor itself and causes a 10 to 15 percent power loss through the gears, is eliminated. A wheel must function efficiently when backing and in maneuvering, and this is quite possible with the larger power plants which are now being used. In this high power group are vessels of lengths ranging from 80 to 130 feet over all. On cruisers capable of speeds of over 25 miles per hour, and between 70 and 100 feet length over all, wheel speeds of 1100 to 1400 r.p.m. work well. On smaller cruisers, between 30 and 40 feet, speeds between 1000 and 1800 r.p.m. can be usefully employed if the vessel is of such form and weight as to "get away" from her wheel. That is, some boats operate with heavy drag until they can get sufficient power to get "over the hump." This occurs when the vessel stops squatting and levels off, thereafter taking no great increase in power for a considerable increase in speed.

In applying the formulas for power, speed and wheel design, the propeller designer must know his constants for the various lengths, forms and weights of vessels. These constants are derived from experience in comparing results of the performance of many types of vessels. The success of the wheel is the result of the designer's skill in the selection of his constants.

The location of the wheel is important for best results for speed, lack of noise and of vibration transmitted to the hull. Water does not pass through the wheel in one direction but a certain amount rotates and reacts agains the hull, causing the familiar hull "thump." Some consider that the wheel produces motion by acting in the nature of a screw; others teach that the propeller works as a pump which thrusts a jet of water against other water already in motion due to current and wake.

Irrespective of all the streamlined designs the architect produces on his plans, the path of the water to and from the propeller is never in a straight line for the reason that it takes the easiest course to supply the wheel. Without locating the wheel properly in the fore and aft, vertical and horizontal directions, the pressure built up by it may be so great under the hull that the water, on leaving the transom, may shoot vertically into the air as the easiest path of releasing the pressure. The result is that the vessel does not get the maximum forward thrust. In a less degree, this condition is demonstrated by the familiar "hump" or "rooster tail" in the wake of the boat. As the "hump" becomes high and closer to the stern, it indicates poor thrust. The best results are indicated where this "hump" levels out well astern of the boat.

I once attended the trials of a vessel around 170′ in length where speeds of around 23 knots were expected. The power plant consisted of two motors of about 1800 hp. each, with a considerable gear reduction. The water, on leaving the transom, shot vertically in the air, wetting the transom its entire height, and raised a "haycock" three feet higher than the deck of the vessel. The large wheels used with the gear reduction caused such tremendous pressure under the hull that it simply pumped a large hole into which the vessel backed. When released, this pressure caused the water to shoot vertically into the air instead of being thrown against other water for forward motion.

I made the suggestion that, inasmuch as the revolutions were not over 800 r.p.m., they should do away with the reduction gear and run the wheels direct at motor speed. The reduction gears were about half the weight of the motors and cost about $150,000! Some time later, when reduction gears were unobtainable,

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An extremely poor aperture as the shaft projects too far. Proper allowance for wheel diameter or possible changes in wheel size were not taken into consideration

William Crake

"Papeete seemed quiet when compared to our visit in '39 and '40, on our outward voyage, when many foreign yachts lined the quay."

HOMEWARD BOUND FROM FIJI

Part II — The Long Voyage from Tahiti to British Columbia

By LORNA DAVIDGE

WHEN WE arrived at Tahiti in November, 1942, after our passage from Suva in the Fijis, the island was peaceful and contentment reigned under the present governor and the Free French régime. Papeete seemed quiet when compared to our visit in '39 and '40, on our outward voyage, when foreign yachts had lined the quay. At that time we met Capt. Fred Rebell, navigator in the Guernsey ketch *Reine d'Arvor*. He will be best remembered for his spectacular voyage from Sydney, Australia to San Pedro, California, in the 18-foot open boat *Elaine*. Alain Gerbault, the French single-hander, also was a well-known figure around Papeete in those days. The latest news of him was that he had died aboard his cutter, the *Alain Gerbault*, in Timor. Now, the only foreign vessel in port other than ourselves was the *Trondhjem*, a British yacht which was under the Swiss flag and leaving shortly for Chile.

Among the many residents of Tahiti who wished to leave the island but could not get transportation home was Jasper Moore, an American who had lived on the island for fifteen years, on and off. His papers were in order, he had permission to land in Canada and he was willing to help with expenses, so he joined us and became the fourth member of *Lorna's* crew. He proved a good shipmate.

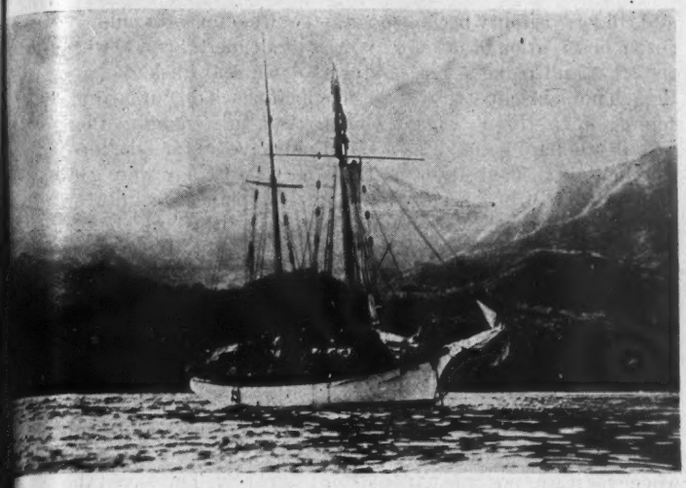
The Governor gave us permission to remain in port for the duration of the hurricane season. This gave us plenty of time to get stores and be hauled out for cleaning and painting so as to be ready to leave about the end of May. But all this was much easier said than done. First of all, there were no stores to be had as the shelves of the traders were empty. The Chinese storekeepers undoubtedly had stocks hoarded, but only those "in the know" could get these, even at black market prices. Occasionally a steamer called for copra and left a few tons of general cargo, which was requisitioned at once for the local army and navy. Small quantities of canned beef, trade salmon, milk and butter appeared as the months went by, and from time to time we secured a few cans of each. Flour, rice, beans and peas were procurable but only in small quantities and were inhabited by hordes of bugs. Still it was no time to be fastidious for we were lucky to be able to get them at all. I managed to get rid of most of the pests by spreading all but the flour, which we sifted, out on a piece of canvas on deck in the hot sun.

There was plenty of coffee grown on the island but no tea or cocoa. However, just before we sailed, we were able to get a few pounds of the latter, direct from a ship in port, and an old Chinese baked 50 kilos of excellent hard biscuit to our order in a primitive stone oven. We packed these in our own press-lid cans. It was March when we first started collecting our supplies and the end of July before we had sufficient for the voyage home.

"The skipper was kept busy, between the frequent warm showers of rain, repairing and strengthening the sails"

Vessels waiting to go up on the government ways at Papeete are required to have their names posted at the harbor master's office. Ours was the seventeenth on the list and it was six weeks before our turn came round, only to be delayed again by the misfortunes of a trading schooner which came in in a sinking condition, though she had only recently come off the ways and had just put to sea the week before.

The morning we were scheduled to be



"Lorna D" at anchor in Taiohai Bay. Taiohai is the administrative center of the Marquesas

at the slip to go up with two other schooners, Dick started the engine and found it wasn't pumping water, so he had to stop it and take the pump down to see what was wrong. He found a good sized squid in the valves. In the meantime, they were waiting for us over at the ways, so when the harbor tender offered us a tow we accepted rather than lose our place on the slip.

Native skin divers, wearing home made water goggles and armed with handfuls of coconut husk, scrubbed the bottoms of the vessels clean while still in the water and then shored them as they came up. Cleaning and hauling cost 750 francs. Joe and Dick did our painting with paint brought from Suva.

We became the proud owners of a brand new Canadian ensign in Papeete, which we needed badly. It was the present of the captain of a Canadian copra steamer. If it hadn't been for the generosity of another, an American this time, we might still be trying to get an American Nautical Almanac for 1943, as well as plotting sheets, for there were none to be had in town.

It had been our intention to break the voyage home to Victoria, B. C., by calling in at Hilo, Hawaiian Islands. However, the American Consul in Papeete thought it most unlikely that we would get permission, even if we went to the expense of cabling. So we decided to stop at the Marquesas, where we had permission to call, even if it meant making 800 miles of easting.

Tahiti is noted for its fine water supply. We loaded our tanks by hose at the quay at 17 francs a tonne. Altogether, we loaded 300 gallons in tanks below and in two oil drums on deck lashed in cradles, as well as about six dozen bottles stowed in lockers. Everyone aboard was reasonably careful with the drinking water at sea and it was not necessary to ration it. There were 100 gallons left in the tanks when we arrived in Victoria.

By the middle of August we were ready for sea. Friends came to say good-by. I wrote to relatives in Victoria telling them we had been delayed but now were ready to sail. The letter was not delivered until three weeks after our arrival back in B. C. In the meantime we were reported missing and two months overdue.

The harbor master of Papeete always comes aboard outward bounders to see if everything is shipshape and seaworthy. "Your running lights, they are good?" he queried. "And your sails, I see that they are strong," he said as he felt the canvas. "And stores you have plenty? The milk you have sufficient?" He thought we could manage all right with the amount we had so he, the pilots and the customs officials wished us "bon voyage" as they stepped ashore. Our lines cast off, we headed for the pass under power, dipping our ensign three times to the French naval vessel in port.

Outside we set the four lowers, the wind being light southwest as we took our departure from Point Venus. The wind failed at sunset, leaving the schooner becalmed all night on a glassy sea which reflected the great southern constellations. Next morning was calm and clear, with the green island of Tahiti and Orohena's cloud crested peak still in plain view. Becalmed, we drifted for four days, the current setting us to the north of the Tuamotu group. Thus we lost our lead to the Marquesas. The expected southeast trades, which should blow strongest in August, did not arrive as promised by the wind charts and sailing directions. Instead, there came an easterly, dead ahead, with dirty, squally weather and steep seas. Two reefs were put in the main, making a ketch rig. Even then she had all she could stand. That 800 miles of easting to the Marquesas was about the hardest part of the whole trip. We covered three times that distance in beating to windward 24 days to sail a distance that took only 10 days under ordinary conditions. Green water came aboard continually, sweeping the deck and burying the fore and main hatches. Sometimes an unusually heavy sea broke against the raised cabin house and from there leaped into the mainsail to pour down and deluge the steersman in the cockpit.

I could distinctly smell the perfume of flowers when 100 miles to leeward of the Marquesas. Of course, no one on board believed me but I found out later that it is a well known fact that you can smell the islands long before you can see them. This is caused by the scented pollen of the cassi plant coming down the wind.

We made our landfall at Motu Iti in latitude 8°41′ S, longitude 140° 37′ W, where a shark took the log rotator. Off Nuka Hiva a shoal of porpoise, their shining hides flashing in the sun, came to meet us. They leaped in formation from one wave top to dive through the next and gamboled around the schooner, giving little snorts as they broke water. The warm blue water around the group swarmed with fish, and three 30-pound tail (tuna) were caught on our feather lure.

Taiohai is the administration center for the Marquesas. The stone barracks of bygone days now serve as school, wireless station, post office, etc. The jail and hospital, with two or three small traders' stores and a number of native houses, make up the pretty little village at the foot of the mountains, facing on a curved white beach.

When about to enter between the two Sentinel Rocks at the entrance to Taiohai Bay, the wind failed under the high cliffs. It was no place to be becalmed so Dick got his engine going. It started, sputtered and stopped. Sticking his head out of the hatch he called: "Better get offshore again, the oil feed line is choked." So Joe got her away on an offshore tack until Dick reported the engine ready to run.

The administrator met us as we let go the anchor off the village, came aboard, found our papers all in order and gave us pratique. We reciprocated with a tuna. No natives were to be allowed aboard on account of the war and to prevent possible stowaways.

After stowing the sails and tidying up around deck, the men decided the next important job was to find a fresh water bath. We noticed that the old stone jetty which had had a pipe pouring mountain water into the bay, was gone. We heard later that since our first visit it had been washed away by a blow.

An old acquaintance, the gendarme, was waiting to greet the

Trading schooners moored alongside the quay at Papeete

"The wind fell light and still ahead, so Dick got his engine going for the first time since leaving Taiohai two months ago"

men as they landed in the light surf. "Plenty water at calaboose, you come," he invited when he heard of their quest for a fresh water bath. He led the way up the narrow turf road to the grassy slope where the ancient jail building stood under giant shade trees. The door was open and a few native prisoners lazily raked leaves, pausing for frequent rests. A concrete tank about four feet deep, with a faucet, made an ideal bath, though a somewhat public one. I had my daily shower at the house of my old friend Madame Dume, the schoolmistress.

The skipper was kept busy, between the frequent warm showers of rain, repairing and strengthening the sails. Dick loaded water by taking an empty oil drum ashore and filling it about three quarters full at the jail faucet, thus leaving an air space to float the barrel. Then, rolling it down the beach, he towed it out to the schooner where it was hoisted high enough on the fore throat halliard to allow the water to siphon through a hose into the tanks.

After a ten days' stay, we were ready to sail on the 20th of September. The skipper had been up to the wireless station to get a time tick the day before, so as to check the chronometer for G.M.T. We received also a new bill of health. The day we were to sail, a native friend, one Kariri, his face wreathed in a happy toothless smile, arrived at the beach with three sacks of oranges and one of mandarins, his numerous progeny following up with bananas, papaya and coconuts. "I like come Amerique with you," he said. "Plenty beer, plenty cinema in Amerique!"

Under way once more, we ran into another week of bad weather with the same old head winds and high seas which loomed up to windward looking as if they were going to overwhelm and swamp us, only to slide under the schooner and come out on the lee side in masses of frothing foam. Some seas, though they did not look so vicious, would hit us broadside with a battering force that almost stopped our way. Many a night, when unable to sleep because of the noise on deck, I have had cause to be thankful for the stout planking and timbers that went into *Lorna's* hull.

As there were four of us aboard, each was given a watch of three hours, standing it twice in the twenty-four. Dick undertook to do the cooking, the worst job in the ship, as I am not always the best of sailors. He was a fine cook and dished up good hot meals under difficult conditions. I took the 5:00 to 8:00 a.m. watch and it was part of my job to call Joe if there were any suitable stars visible for observation.

Later on, as we made more northing and the days grew shorter and colder, visibility became poor and quite often we would not get an observation of the sun for days at a time. This was when the stars and planets were useful at dawn and dusk. Polaris, though not a bright star, was a convenient check on our latitude coming north, that is, when the boat was steady enough; otherwise it was hard to hold, as Joe did not have a star telescope. The method of navigation used was *H.O.211*. There were generally plenty of bright stars as well as the planets to draw on when their bearings were right; Arcturus, Sirius, Aldebaran, etc., all useful in their turn.

The binnacle light had given a good deal of trouble during the first part of the voyage so, while in Papeete, Joe and Dick devised a rig consisting of an arc of strip brass athwart the compass from edge to edge of the binnacle, with another to brace it, leading forward. This left half of the compass clear. Attached to the conjunction of the two straps was a small electric bulb in a tapered tube, pointing directly to the lubber line and 10° on either side. The switch was near the wheel, handy to snap off whenever it was possible to use a star to steer by. This saved the light and eye strain. The binnacle arrangement was satisfactory but awkward when taking azimuths, since we used a shadow pin.

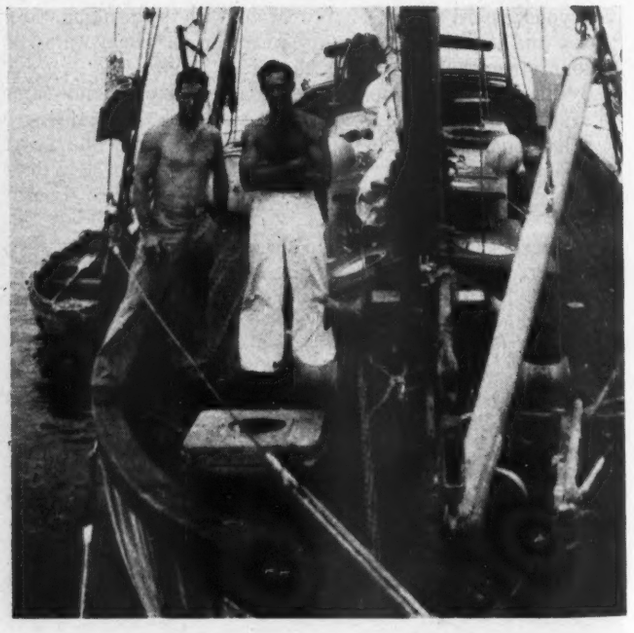
After noticing the taffrail log failing to register one day, and hauling it in to find a shirt wrapped around it, the skipper sought to avoid a similar happening by rigging a ten foot outrigger boom from the starboard main shrouds and streaming the log from this, to keep it clear of debris thrown or blown overboard. We used a Walker yacht log, Excelsior No. 2. Three of our five rotators were taken by sharks. Skippers of island schooners told us they had given up using logs for this reason. They ran out of rotators and couldn't get any more. Another time that our log failed to register was when a sucker fish was found adhering to the rotator between the blades.

We crossed the Line on the 30th of September, 1943, in longitude 139° 35′ W and were not delayed in the Doldrums as we had been on our southward voyage but the winds were light and ahead until October 31st, when we reached latitude 30° N, longitude 138° 12′ W, and could lay our course to our destination.

A lot of our hard won easting was lost in the equatorial current which, from September 28th to October 2nd, set us 195 miles to the west. Latitude 5° 42′ N found us in the counter equatorial current with a weaker easterly set as far as 10° N latitude, where we found a westerly set again.

The skipper made it a rule, especially at dawn and sunset, for the one on watch to have a good look around the horizon for life rafts or possible boats with survivors from sunken vessels. We might have had a problem on our hands if we had made a rescue

(Continued on page 152)



Dick and Jasper on deck at Taiohai after filling the water tanks. Weatherbeaten and salt encrusted after 61 days at sea, the 'Lorna D' was an object of curiosity when she arrived at Victoria

Tad Horton Photo from "Parade"

Thousands of hours of shore patrol duty have been put in by part-time volunteers during the past few years

THE COAST GUARD AUXILIARY'S FUTURE

By JAMES H. KIMBERLY

Cmdr., USCGR; Assistant Director, U. S. Coast Guard Auxiliary

WHILE it is perhaps too early to discuss the specific postwar plans of the Coast Guard Auxiliary, the subject is of particular interest at this time. The war is still far from won but, with the shifting emphasis from those dark days when the Auxiliary aided in guarding our nation to the present phase in which the Armed Forces are carrying the battle into enemy waters, it is natural for members of the Auxiliary to wonder as to what the future has in store for them. This is particularly so at a time when members of the Temporary Reserve are reverting back to their Auxiliary status.

Admiral Waesche, Commandant of the Coast Guard, has been deeply impressed by both the size of the Auxiliary and the spirit with which its services have been rendered. He feels that the Coast Guard, the one Service to enjoy such a volunteer civilian connection, can be of aid to the Auxiliary, and vice versa. There is no doubt in the minds of high-ranking officers that the Auxiliary provides an important civilian-Coast Guard relationship. For that reason, the Coast Guard is most anxious to bring about a bright postwar world for the pleasure boat owner, an era of mutual concern and assistance.

While no official plan has as yet been outlined in all of its ramifications, Headquarters has already developed a number of ideas gained from Auxiliary members in various parts of the country. These members have so frequently suggested the same ideas as to what the future should hold that it has not been difficult to do the preliminary charting of the course to be followed.

The first consideration is that of the pleasure boat "fleet," for there are many ways in which Auxiliary boats will be of great and needed future service. At the moment, Headquarters is trying to set up a program whereby the expert teaching facilities of Auxiliary members will greatly benefit both the present and future yachtsman. Under an Auxiliary educational program, the prospective small boatman — the chap buying his first craft — could come to an Auxiliary class and be taught the rudiments of piloting and seamanship. There he would be given instruction in marlinspike seamanship, boat handling, rules of the road, care and maintenance, and actual demonstrations of boat operation. If the newcomer proves acceptable to the members, he could in time become a Flotilla member.

Secondly, Headquarters is following up suggestions that have come in from members regarding the design and construction of pleasure boats. It is believed that the Coast Guard may well interest marine manufacturers in new devices and equipment, particularly those relating to safety at sea. Numerous means of making small boats safer than the Motor Boat Laws now require, are also considered.

Thirdly, Headquarters is convinced that the Auxiliary will be of permanent aid in executing regular Coast Guard assignments. Plying navigable lakes, rivers and harbors, the Auxiliary will not only be in an official position to make recommendations but to supply information. As a result, they will be able to give the Coast Guard immediate information as to changes in navigational hazards, sending in reports on navigation aids that may not be functioning, and on all other matters which they feel should be called to the attention of the Coast Guard.

Now to a consideration of the other side of the picture. If the Coast Guard is to benefit by such volunteer services it is only fair that it, too, should make a valuable contribution to the Auxiliary. With that thought in mind, Headquarters has succeeded in initiating the passing of a new Act of Congress, known as H.R. 5255, which amends the Coast Guard Auxiliary and Reserve Bill of 1941, and makes three provisions of great interest to every Auxiliary member.

Under this new law, the Coast Guard is enabled to use private aircraft when placed at its disposal by the owner. Of primary value to pleasure boat owners whose craft are in distress, the use of such planes will augment the regular Coast Guard rescue facilities. And, under the same ruling, the Coast Guard will now also be enabled to accept the use of any radio stations placed at its disposal, thereby affording a new and comprehensive coverage to Auxiliary members everywhere. Just what means will be used to bring owners of aircraft and radio stations into flotillas has not yet been worked out.

Also, under H.R. 5255, the Auxiliary may be designated by the authority of the Commandant to take over duties at present being given only to members of the Temporary Reserve. This ruling, alone, will give the Auxiliary a broader scope than it has ever enjoyed, and through it the Auxiliary will be ready to take over functions for which it has been so admirably suited.

Of great importance to every member are the provisions in the new law covering the matter of benefits. They state that a member of the Auxiliary, when on active duty, is entitled to the same benefits previously accorded only to the Temporary Reservist. Hence, the Auxiliarist who becomes ill, or who suffers an injury or death, while on duty, will be provided for.

As yet, nothing has been definitely decided as to the character of postwar uniforms. The Coast Guard is anxious to provide those of a type which will be universally popular and it is hoped that they may be similar to those provided Coast Guard shore establishment personnel (but with suitable Auxiliary insignia).

The Auxiliary has so thoroughly proven its wartime value and is so obviously of peacetime importance that the Coast Guard is anxious to see its members fittingly rewarded; numerous plans are now under consideration. One subject that has been the subject of extensive discussion has been the basis of making possible the use of certain Coast Guard stations and shore establishments. Another plan has to do with setting up a procedure by which members may have the opportunity of going to sea in Coast Guard Cutters. Already under way are plans to secure certain obsolete Coast Guard equipment.

I believe that the Auxiliary has a bright future before it. In those first harassed and frantic days, when the tragedy of Pearl Harbor changed American life almost overnight, the volunteer forces were too often innocent victims of the confusion of the moment. But the Auxiliary went to work, without complaint and without grumbling, and did more than anyone could have ever thought possible. It is only fitting that it should now have much to look forward to.

IN THE PATH OF THE HURRICANE

A Survivor's Account of Fifty-eight Memorable Hours

By R. F. HAINGE, *Ensign, USCGR*

A FEW DAYS before the worst hurricane in fifty years to hit our east coast reached the area off Cape Hatteras, the two Coast Guard cutters *Jackson* and *Bedloe* were ordered to the aid of an American Liberty ship which was in distress off the coast to the south'ard of that North Carolina cape. An Army tug, the *ATR-6*, which had accompanied the cutters to the scene, took the Liberty in tow and, with the Coast Guard cutters acting as escorts, began the slow trip to Norfolk.

I was the Communications Officer aboard the *Jackson* and in that capacity had noted the increasing frequency with which the hurricane warnings were being received. But, outside of the usual precautions that were taken at the approach of any storm, the hurricane did not cause us much concern. Its path was charted and the approximate time at which it would hit the area that we would be in was noted. As nearly as we could estimate, Thursday morning, September 14th, about six o'clock, would find us on the outskirts of the storm and from then on we expected a pretty rough ride. Although our vessels were only 125 feet long, they were excellent sea boats, fully proven, so that we felt no alarm.

The days preceding the storm were uneventful; the seas were moderate and only a light breeze was blowing. On the night before the storm hit us, I was officer of the deck during the watch from eight to twelve. At this time, the sea was almost calm but the sky and barometer gave unmistakable signs of the approaching hurricane. At midnight, I was relieved and went below to get what sleep I could. During the early morning hours the sea began to make up so that after 6:30 I found it impossible to stay in my bunk. As I was going topsides, I thought to myself that we had estimated the arrival of the hurricane quite accurately. At this time we were just north of Cape Hatteras, on a course for the Virginia Capes. The wind was blowing about 60 m.p.h. from the NE. We were now rolling so much that first one rail and then the other would go under and the *Jackson* would dive into a sea, shudder a bit, and then come up as if to throw the water off. By this time the seas were sweeping over the top of the flying bridge, almost swamping the ship, and it was raining hard. The wind, which had risen to whole gale force, caused the flying spray and rain to lash at us like hailstones so that it was impossible to face to windward. We had the tow in sight astern but the *Bedloe* was out of sight, hidden by the seas on our starboard beam.

Official U. S. Coast Guard Photos

In center, the author is assisted out of the Coast Guard plane which spotted the survivors of the USCG cutter "Jackson"

A short time later, we received a message that the Liberty ship and the Army tug had parted the towing hawser. As they were then in about 16 fathoms of water, the Liberty let go both anchors with a full scope of chain and, with the partial steam that she was able to get up, was trying to keep from being driven on the beach, then approximately 20 miles distant. The tug headed for port.

The fury of the hurricane mounted with each minute. Course, speed or mission assigned meant nothing to us then; it was a question of fighting to keep the ship from broaching-to. The Captain was conning from the wing of the bridge; the executive officer was advising him of wind direction changes and I was on the engine order telegraphs, helping the helmsman to keep on the desired heading by use of the engines because the rudder alone did not have the power to maintain the heading of the ship against wind and sea.

We estimated at this time that the wind was blowing at 100 knots and the waves were mountainous. The ship was being tossed about like a cork; sometimes it would seem as if we were lifted clear out of the water, to come down with a crash that made us feel as though we were going right through the deck. This continued for a couple of hours while the storm grew in fury. Our barometer registered 28.04 inches.

About 10:30 a.m., the ship was borne to the top of a towering sea and was then struck on the starboard side by two other huge seas. She rolled over on her beam ends until her mast actually dipped into the water. We on the bridge were tossed in a heap to the lee side. As these seas passed, the ship slowly righted herself only to be struck by another sea and rolled over on her port beam. At that moment the full force of the wind caught us and, for the second time, our mast was in the water. In a few seconds, it was all over. There was no opportunity to use the radio to send an SOS as the radioman had been thrown from his chair against a bulkhead, breaking three ribs. The skipper, who was in the pilothouse at the time she went over, led his men to comparative safety through the door leading to the starboard wing of the bridge. They were forced to climb up as through a trap door using the binnacle and engine telegraph as steps.

At the time, I was on the starboard wing,

The "Jackson" was one of the Coast Guard's well-known 125-foot class. Steel-hulled and of 220 tons, they are diesel powered and rated at 13 knots

having just come topsides after decoding a radio message. As we went over, I was tossed against the ladder leading to the flying bridge. By the time I had regained my balance, the watch below were already climbing out of the forecastle. There was no confusion nor much talking. The skipper ordered the rafts cast off but there were only the four starboard rafts available as the port rafts were buried deep under water.

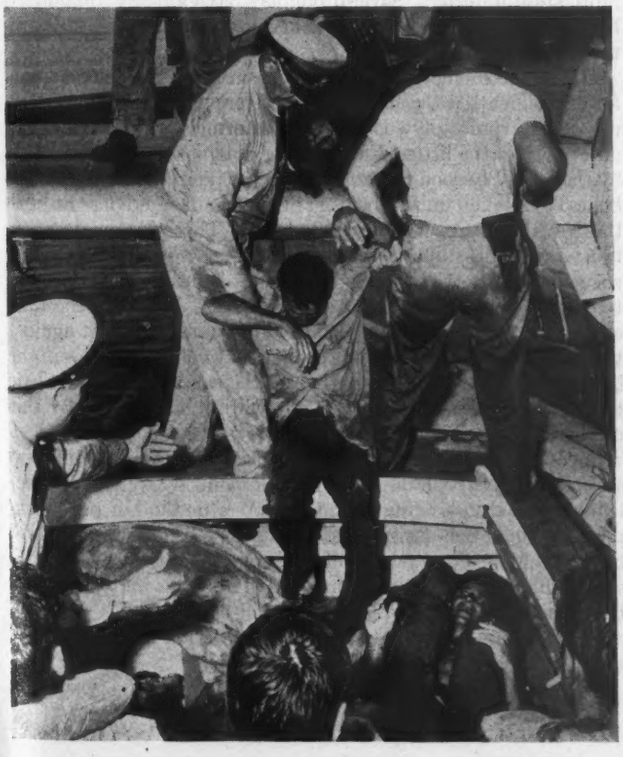
All the men who were on watch at the time the *Jackson* capsized had on their life jackets but most of those who were below had been thrown out of their bunks when she went over and, as the lights went out, they were unable to find their life jackets. Indeed, the first thought in their minds was to get out of the ship and in this they all succeeded. Due to the ship being on her side, the rafts had to be lifted from their racks and several men were washed overboard by the huge seas in the time that it took to get them free. As the rafts were thrown into the water, men jumped into them and began the struggle to hang on while they were being turned over and over. Since we were able to get off only half our rafts and as they were of the small type, about six feet long by three feet wide, to some of which a dozen men were clinging, they were soon loaded far beyond their rated capacity.

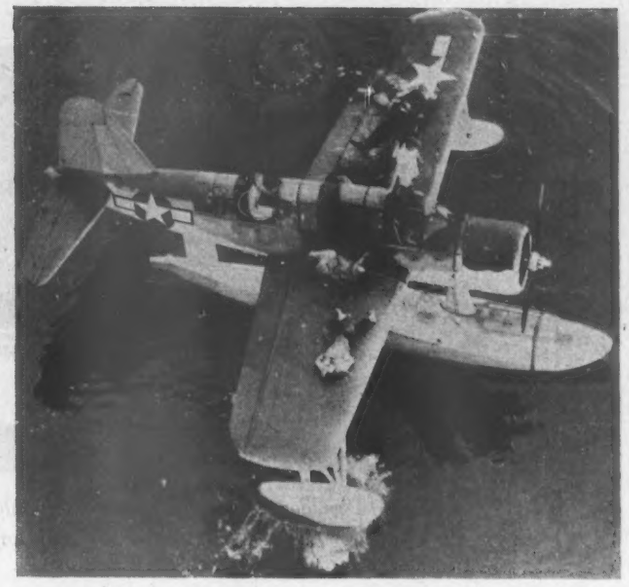
As we got the last raft into the water the ship turned bottom up. Many men still were hanging on to her sides and some managed to climb up on the slippery bottom and cling to the keel. Apparently the ship appeared a more substantial refuge than the tossing rafts from which the men were wrenched by the cresting seas as fast as they caught the life lines.

A short time after the ship capsized, I was washed off by a sea and remained so long submerged that I feared I would never come up. I held my breath until my lungs almost burst and hoped that I would reach the surface in time. Eventually I surfaced but only after swallowing what seemed like gallons of salt water. I looked about and saw that the ship was awash with a few of the boys still clinging to her keel. I learned later that these could not swim.

There were no rafts in sight so I just floated around in my life jacket, trying to catch my breath between cresting seas that were breaking over my head. Finally, as I was carried to the top of a big sea, I saw two rafts in the distance and began swimming towards them. They were probably only a couple of hundred yards away but it seemed an eternity before I reached the nearer one. To that raft ten men were clinging. I made the eleventh. Presently we saw another raft going by with only four men on it, so four of our party swam over to the other to even up the load.

Bruised, dazed and exhausted, the remaining members of the "Jackson's" crew are transferred from the plane for the trip to shore





After 58 hours in the water, the "Jackson's" survivors sprawl on the wings of the rescue plane. This photo was made from a Navy blimp which dropped them emergency supplies

The best that the remaining seven of us could do was to hang on to our raft and try to keep it on the surface by treading water. With so many clinging to it, any attempts to climb into the raft only caused it to sink further and it seemed that every sea that came along rolled it over and over. After each such sea had passed, we would all scramble back to the raft again, as it proved impossible to hold on while it was rolling over. I found a piece of marline in my pocket and with this I lashed my hand to the raft's lifeline. As a result the flesh on my left hand was cut to the bone.

About 1:30 p.m., when we had been in the water some three hours, the center of the hurricane passed over; the wind stopped blowing and, although the seas did not diminish in size, it was a great relief to have the wind drop and the salt spray stop driving into our eyes. From time to time we had seen some of the other rafts, as we were all drifting in the same general direction. Once we managed to lash two of them together but the waves banged them against each other so hard we were afraid they might crack up, so we cast off the lashings.

All this time we had been hoping that either the *Bedloe* or the tug might spot us but, due to the high seas and limited visibility, they failed to do so. As we learned later, the *Bedloe*, too, had capsized. Soon after the center of the storm passed over us, we caught its full fury again. From then on until midnight that night, a period of perhaps ten hours, it was a terrific struggle to keep a hold on the raft. Each time a hold was lost it became harder to swim back again. These struggles consumed our remaining strength and we later learned that it was during this time that most of the men from our ship were lost.

The quantity of salt water that I had swallowed made me violently sick; as a result, I fortunately cleared my stomach of it. At the time it left me weak but later, talking to the doctors in the hospital where we recuperated, I learned that this was one of the best things that could have happened to me. The men who had failed to rid their stomachs of salt water were the first to become desperately thirsty and later they had the hardest time trying to remain rational. After our rescue, I talked to our Chief Boatswain's Mate, an old hand, about swallowing salt water and he told me that the first thing he had done when he reached a raft was to put his finger down his throat to get rid of all that he had swallowed. This trick he had learned from long experience at sea and I pass it along as a point worth remembering in an emergency.

By the following morning the seas had subsided enough so that we could take turns getting into the raft and resting for a

(Continued on page 144)

The molded plastic hull presents possibilities of unlimited development. Here is the Columbia Rope Co.'s model of an outboard runabout which is to be molded in two pieces

THE SHAPE OF THINGS TO COME

What the Yachtsman May Expect in Materials and Methods

By W. H. de FONTAINE

HISTORICALLY it is a fact that some of our greatest peacetime developments have come about as a result of the necessities of waging war. The magnificent system of Roman roads, for example, was built so that Caesar's legions could move rapidly across the face of Europe and of Britain. To this day many of these great highways are in use. Gunpowder, while one of the deadliest inventions of all time, has also served to expand the horizons of civilization beyond anything that would have been possible without its use. Mining operations which give us our metals and our fuels, great engineering feats such as our monumental power dams and even many agricultural developments would have been utterly impossible without the use of explosives. And this war is no exception to the rule. Who can foretell at this writing what peacetime uses we will find for such combat-fostered inventions as radar, for example? Electronics, plastics, laminates, synthetic fibers and preservatives have experienced unprecedented expansion in both development and use during the war years. New navigational instruments and methods have appeared, developed primarily for aviators but of great use to seafarers as well. These instruments and the new tables designed to expedite their use make it possible for a navigator to get an accurate fix in a fraction of the time formerly necessary. And so on, ad infinitum.

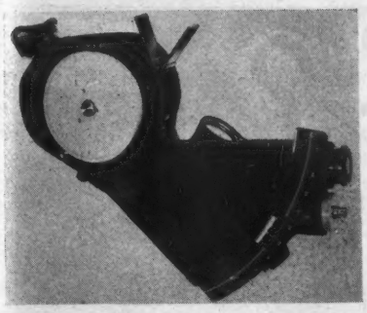
Yachtsmen are interested particularly in knowing what effect wartime developments may have upon the design and construction of postwar yachts. Discussion of this question with a great many men whose opinions should be authoritative reveals that there is a surprising unanimity regarding hull construction probabilities. Their predictions may be summed up as follows. In the larger sized yachts — those of, say, 35 feet and over — and in custom-built yachts, the old and tried methods of construction will still be used. This generalization needs some qualification. The use of glued, laminated structural members (keels, stems, etc.) will probably increase greatly and become standard practice. There are several excellent reasons for this, one being the scarcity of suitable material in the sizes required for these members. Another material that will probably appear more frequently in our postwar yachts is plywood for decks. There is nothing new about this use of plywood but its advantages and the large units in which it may now be had will encourage its greater utilization. For bulkheads, of course, waterproof plywood has no equal in wood construction. This applies also to doors, panels and counters.

There is a likelihood that in the larger sizes, and in custom built yachts, there will be an increasing use of steel, aluminum alloy and bronze for hulls. Improved welding methods and new alloys open up interesting possibilities in this field. Metal hulls have many advantages as well as some disadvantages. The problem confronting advocates of these materials is to retain the former while overcoming the latter. The Dutch, who have little if any shipbuilding timber in Holland, have long built their boats, both large and small, of steel; it is logical to suppose that the use of this material will spread to this country as our familiarity with its advantages increases and our technique of fabrication improves. Several builders have already announced their plans for postwar steel yachts in standardized designs up to 50 feet over all.

It is in the smaller sizes that the door appears to be wide open for experiments with new materials. Here we find an increasing use of waterproof plywood and of preformed plywood hulls, an outgrowth of the little 12-foot sailing dinghies that were formed by the U. S. Plywood Co. and finished by The Anchorage. These boats have taken quite a beating at the hands of novices at both the Naval and Coast Guard Academies. There is now no question about the suitability of the material for building light, rugged and watertight hulls. It becomes a question of comparative costs when one gets into the larger sizes, for here the high cost of the mold, which has a limited life, must be offset against the savings in labor costs and the fact that volume of sales in the larger sizes is necessarily less than in the small classes. It is safe to say that few custom-built yachts will be constructed by this method.

Several organizations are experimenting with plastic hulls and at least one has been developed to the point where the product has been used in landing operations. As a method of producing popular, small one-design classes, this type of construction will bear watching. For yacht tenders, fishing boats, outboards and sailing dinghies, where mass production methods may profitably be applied, perhaps the plastic hull will be the answer.

Hollow spars of laminated wood construction have been built



Improved navigational devices, such as the Link aviation-marine sextant, will make possible a degree of accuracy hitherto unknown

for the Signal Corps. They are light, strong, rigid, and should be reasonable in price when they come on the market for civilian use. A marked decrease in mast weight would result in a reduction in the ballast necessary, with a resultant increase in speed. For spinnaker poles which have to be handled without benefit of tackle, in many cases, these tubular spars would seem to be ideal. A pear-sectioned dinghy mast of laminated construction has been developed which seems likely to be a "must" on these little craft when it becomes available. The practice of stepping the mast on deck or on the cabin top is likely to become more popular as its advantages become better known. The use of properly designed plywood bulkheads permits this method of stepping the spar with the attendant increase in usable space below decks. From information at hand, it appears that there will be little, if any, change in methods of staying masts or in standing rigging fittings in the postwar era. These had been pretty well improved in the prewar days.

There is one old and well-tried method of building that has been revolutionized by the introduction of the new waterproof glues which are now available and by the extensive use of plywood bulkheads, and that is the method known as "strip building." In this system of construction, few transverse members are required and the usual bulkheads necessary to a satisfactory cabin layout are generally sufficient for the purpose. Except for the garboards and the sheerstrakes, all planks are of the same section from stem to stern and each is edge nailed to the strake below as construction progresses. The introduction of waterproof glue into the seams of the planking before nailing greatly strengthens the structure and renders it watertight. In the improved strip system, all upper and lower plank edges are given an arced surface, one convex, the other concave and of the same radius. The planking surface, after it has been gone over with a sander, is reported to be smooth and to show no joints whatever when painted. No calking is required with this system of construction. The wooden skin is secured to the bulkheads by fastenings screwed to stiffening pieces which are in turn glued and screwed to the plywood bulkheads. It is claimed that, owing to the fact that much of the planking can be done by comparatively unskilled labor, it is possible to build a hull more reasonably by this than by conventional methods.

The fabrics that will be available for yachtsmen when the war is over will be a revelation to many. There will be waterproof clothing that is colorful, light weight and non-sticking. And it will be really waterproof. You will be able to fold or roll it up and stow it away in almost no space at all. Awnings, sail covers, boat and hatch covers will be waterproof, mildewproof and washable. They will be available in any color that one may desire. They may be folded without danger of cracking the finish and be put away while still wet without danger of rotting. The new jumbo sized zippers will be much in evidence as closures for sail covers, waterproof clothing and for rigging the side curtains to new and improved fabric cockpit awnings. The side curtains will have transparent plastic windows so that one will not feel hemmed in.

Of all the new fabrics, however, the new sail cloths will be the most welcome and the most spectacular. These will all be impervious to the ravages of mildew or rot even when stowed away wet for long periods. Off-the-wind sails such as spinnakers will be so light in weight and so effective in light airs that they will revolutionize our conceptions of these sails. Working sails, too, will be lighter and at least as strong — perhaps stronger — than at present. All good sail cloth will have zero porosity — that is, the wind will not blow through it — and its surface will be smoother than the cloth with which we have long been familiar. As a result, sail boats should be faster than they have been heretofore.

An interesting possibility in connection with making sails from some of the new materials, and one which could do much to reduce their cost, is the ability to cement the seams of a sail instead of the time-tested method of sewing them. I am told that a seam made in this manner is not only cheaper and stronger than the old style seam but also will never rip through the breaking of the stitches owing to chafe or rot. As yet, this method has not been adopted for sailmaking but it would seem but a question of time before some enterprising sailmaker will use it and steal the show.

In addition to the new synthetic fabrics, draperies and upholstery materials may be made from glass, which is fireproof, mildewproof and non-shrinking. Glass fabrics and tape will also be found in technical applications, electric motor insulation for example, where improved operating results will be apparent.

One of the most welcome peacetime sights to greet the eyes of the sailorman will be the first coil of *real* manila rope on his dealer's shelves. There may be another kind of rope bidding for his favor, however, for the Nylon rope developed by duPont for glider towing cables has many points of particular interest to yachtsmen. It is strong, will not mildew or rot and has great resiliency, making it ideal for towing or mooring lines. It would seem to bid fair to become the perfect anchor rode of the future.

It is certain that the use of insulating materials, both for deadening sound and for controlling heat, will be much in evidence in the well-built yacht of tomorrow. Prominent among these materials will be spun glass, since it combines high insulating qualities with imperviousness to moisture. The rubber companies, too, have developed some new materials which will doubtless be popular for this purpose.

No discussion of postwar developments would be complete that did not touch upon the possible use of plastic substitutes for many of our old time materials. There are doubtless many places where the new materials will prove satisfactory and, indeed, in some cases even superior to the materials they displace, but a word of caution seems appropriate. Do not expect too much of the new substances or you may be disappointed. For electrical appliances, for certain items of interior hardware such as drawer pulls, and in many other similar applications they will find ready acceptance, but this scribe is one who questions the prophecy that you will see plastics take the place of good bronze or locust for cleats, at least in the larger sizes; as for moldings, rail caps and the like, plastics may gradually take the place of wood, but I doubt it.

Many of the so-called postwar designs appearing nowadays are shown with exaggerated streamlined windshields and win-

(Continued on page 162)

Western Electric Co.

Today the marine telephone has gone to war. When it comes back aboard pleasure craft, its wartime development will enable yachtsmen to make increased use of ship-to-shore communication

REPORT FROM WASHINGTON

From Scores of Government Agencies Come the Decisions Which Affect What the Yachtsman May Expect, Hope For and Ultimately Receive

By CRITCHELL RIMINGTON

THERE is neither news nor novelty in the statement that both yachtsmen and the marine industry are in "a quandary of expectation." Both groups have concerned themselves almost solely with the war effort during these years of conflict; both are of the same mind in their determination to continue to do everything possible to assist the war's speedy conclusion. But this New Year brings a new and different picture. The war contracts of many builders and marine manufacturers have been successfully concluded, and for those whose productive ability is apparently no longer needed (at least for the time being) the question of "where, and how, do we go from here" is one which requires an answer today that they may initiate planning for tomorrow.*

To the yachtsman whose lot has been cast with the home front, the question of what "tomorrow" has in store is equally pertinent. Secondhand boats are few and far between; secondhand prices seem destined to remain at their present stratospheric levels for another season at least. Can any new boats be built? Engines and all types of gear are wearing out. Can replacements be obtained? Another fitting out season is but a few months away. What about paint, new rigging, a new stove? The naval architects, builders and manufacturers have even more of a stake in the future. Even the most pessimistic member of the marine industry must admit that postwar yachting is destined for a boom of unprecedented proportions. Is it practical, or even possible, to wait until VE or VJ Day to formulate peacetime plans; more important, is it necessary to wait? If not, on what basis may they start a gradual program of reconversion? And, turning to the more immediate considerations of the 1945 season, is there a yachtsman who wouldn't like to know the new status of cruising regulations, gas allowances and other kindred matters?

Is there, at this writing, an answer? There's the rub — for there is, and there isn't! Yet, out of the melange of rules, regulations, assumptions and predictions which necessarily becloud all wartime economies, there are certain recently established factors which do throw a considerable amount of light on the many topics which are the concern of the entire yachting fraternity. But the reader is cautioned to bear in mind that the following observations are *unofficial interpretations* of findings which are subject to change at a moment's notice. (YACHTING makes this statement to avoid threats of libel, false representation, wishful thinking, deceit, fraud, distortion, invention, fabrication or subscription cancellation. In other words, proceed at your own risk!)

Question — "What about the construction of new boats?"

A Navy spokesman has said, in effect, "The Navy nowhere near utilizes the capacity of the small boatbuilders. These have available capacity for production for civilian use, but priorities of various kinds, plus the difficulty in obtaining manpower, act as brakes on the resumption of civilian procurement. We know of no Navy opposition to resumption of production for civilian use respecting such capacity as is not needed for Navy purposes."

At the present writing, it can be assumed that the Army is of much the same opinion, yet within recent weeks there have been repeated rumors that additional orders for moderate size craft will be forthcoming from military sources. Whereas any opinion on this subject is guesswork of the most speculative kind, the character of the Pacific campaign — both present and future — indicates that military requirements are subject to sudden and radical changes. It may be assumed, however, that no new construction, either military or naval, will involve as many yards or to such a large degree as have the building programs of the past three years.

But the builder's (and equipment manufacturer's) possibility of obtaining a "go ahead" for any type of "nonessential" construction is predicated on materials (War Production Board), manpower (War Manpower Commission), and the helping hand of that government agency which was set up to aid and

* *See* YACHTING's *"Postwar Survey" on page 58.*

advise organizations having a personnel of 500 or less, the Smaller War Plants Corporation. The collective comment of these three agencies seems to indicate that there is little question but that a reasonable amount of new construction will be permitted after VE Day, the amount dependent, however, on the extent to which the Pacific campaign affects materials and manpower. Until then, new construction is permitted only to the following extent:

1. If a yard (which is no longer engaged in war work) has a "stockpile" from which the boat or boats in question may be built and outfitted, it may proceed with construction providing the manpower so employed is not urgently needed in local war activities. The manpower consideration is an important one; in one area manpower may be plentiful; twenty-five miles away it may be critical. It is, therefore, a vital consideration.

2. The WPB points out that "there are no orders on the production of pleasure craft, but there are two material orders, M-126 and M-9-c, which restrict the use of iron, steel, copper and copper products and marine hardware in the building of pleasure craft. Before a builder can legally use steel and copper for other than joining hardware, such as nails, screws and bolts, he must appeal the limitations of the above mentioned orders." However, a certain amount of replacement parts and materials are now available.

3. But, to use "stockpile" materials, a builder must obtain a "spot authority" to proceed with the work. If local conditions (manpower) are not, or do not become, acute and if the materials (including lumber) are not, or are not subsequently, on the critical list, such authorities can usually be obtained.

4. It is suggested that builders who are contemplating the construction of pleasure craft, consult the local office of the Smaller War Plants Corporation for further information on the above.

Question — "How, and on what basis, can a builder obtain authority to build a 'pilot' model of a boat or boats?"

According to the WPB, a pilot model is an experimental model which is made to establish whether it can later be produced on a commercial basis. The WPB regulation for such action, which is covered under its form PR-23, authorizes the building of such "pilot" models upon acceptance of application. Whereas, such models are only of indirect interest to yachtsmen (for they cannot be bought), their construction will expedite the development of the boats which the yachtsman can ultimately buy. However, it is important that builders recognize that:

1. The cost of a single model must, generally speaking, be limited to $5,000 in one month.

2. Such "pilot" models shall not be "exhibited to the trade or the public . . . for the purpose of promoting sales or creating consumer demand." That is, they can be made to develop a design or a building technique, but not as showroom samples.

Question — "What about costs of boats and engines, new and secondhand?"

1. Price ceilings exist on motors, both new and used, as follows: New motors must be sold at prices in effect in October 1941; used motors, when sold "as is," may not sell for more than 55 per cent of the new price; when rebuilt at 85 per cent.

2. It appears that the only OPA ceiling on secondhand boat prices affects those having an over all length of 25 feet or less. Such boats, if in first class condition, are to sell at 75 per cent of their new price; otherwise, at 33⅓ per cent of their new price. It is assumed in the trade, however, that this regulation was designed to affect only unrigged open boats.

3. Any statements regarding postwar prices, either of boats or equipment, are conjectural. Collective opinion is that prices will be 25 to 50 per cent higher in the first few years after the war. The cost of labor and materials are the affecting factors, but it is hoped that quantity production will then tend to reduce them.

Question — "What about the sale of surplus boats, engines and equipment?"

No definite reply to this question is possible at this time. The consensus is that most marine equipment sold as surplus, with certain exceptions, will not be suitable for pleasure boat use. This is particularly true of hulls, most of which would be in excess of 60′ o.a., and engines, the average of which are of a higher hp. than is practicable or necessary for any but larger craft.

1. As a "trial balloon," the Maritime Commission recently placed on sale, in various parts of the country, a total of 2936 assault boats at a retail fixed price of $75. Boats were offered to bona fide dealers at the price of $52.50. These boats are 13 feet 6 inches in length, and have no motors.

2. The Maritime Commission has recently placed a group of "as is" motors on sale to "qualified" individuals; forty-eight in number, they were both gas and diesel.

3. It is believed that yachtsmen are in error if they anticipate any appreciable number of bargains in suitable surplus marine engines or equipment.

Question — "What about the return of boats which were *loaned* to the Coast Guard?"

The only yachts actually borrowed by the Armed Forces were the Reserve Fleet of the Coast Guard. Since they were "on loan," the basis of their return is different from that practice followed by the War Shipping Administration. With regard to their return, the Coast Guard states:

"At the present writing, all but 400 of the 2200 boats which made up the fleet have been turned back. These craft, ranging in length from 25 to 100 feet, were pressed into service at the outset of the war.

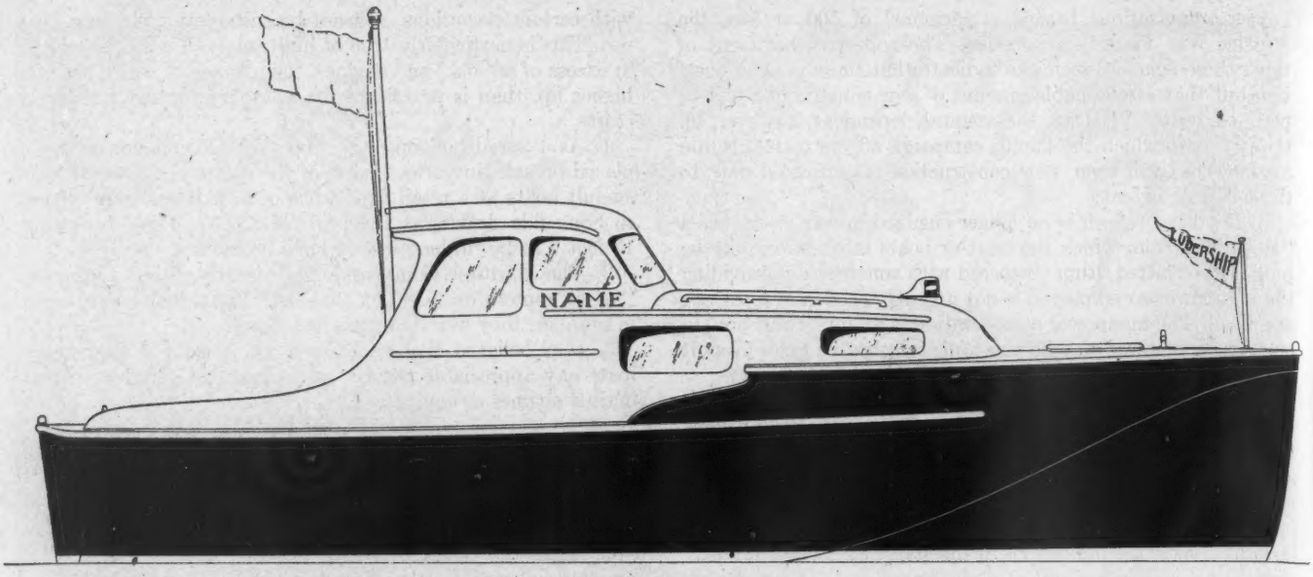
"Now that boats especially designed for the Coast Guard are in operation, these borrowed yachts are no longer needed. The Coast Guard has been returning them to their owners since the end of January, 1943, with the order of return depending upon the boats' usefulness to the service. Each district received a certain quota of boats to be returned, and it is expected that all will have been returned within the next few months.

"Due to the shortage of certain vital materials, the Coast Guard has been forced to modify its original provision that these boats would be returned to their owners in the same condition as when received. The Reserve Act of 1939 and the regulations of the Coast Guard Auxiliary, stipulated that the boats would be restored to their former condition when returned. But material shortage, coupled with the lack of manpower and the congested conditions in shipyards, has led Headquarters to the decision that the owners would be better served if the boats were returned in their 'as is' condition, with a fair cash settlement in lieu of repairs. One of the objections raised has been that the Coast Guard might as well keep the craft until the end of the war and then repair them. The Coast Guard states that this alternative was considered but that it would involve more than merely laying up the boat because each one would have to receive some attention from time to time, since it would not be fair to the owners to have their craft laid up and neglected, and this would involve the use of personnel needed in combat operations.

"In returning borrowed boats, the Coast Guard has avoided conflicting scales of values by adhering to the WSA standards, used in purchased boats, to determine the amounts to be paid in lieu of repairs when returning them. This is significant in cases where the amount for repairs approaches what the outright purchase price would have been. It is the Government's opinion that it is patently unsound for the Government to pay, for example, $30,000 for repairs when the outright purchase price would have been $25,000. Another factor involved in the decision to use WSA standards was the fact that this agency insures all Coast Guard reserve craft.

"The procedure in returning such boats, as it is handled by one district (and other districts act similarly), is as follows: When a boat is marked for return to her owner or owners, a three-man committee makes an independent survey of the vessel. The committee, in this case, is composed of a former yachtsman who has been associated with boats all his life and therefore has paid for repairs on his own craft, an expert on marine engines and a former boatbuilder and shipyard owner. The yachtsman is also a member of the Reserve Vessel Board, the agency that

(Continued on page 160)



The Luders molded plywood 24-foot cruiser, "Little Gulfer," is designed to fill the requirements of size, speed and seaworthiness

A LITTLE SEAGOING MOLDED PLYWOOD CRUISER

By A. E. LUDERS

REQUIRING a small, fast and extremely seaworthy cabin motor boat for biological survey work off the rugged coast of Vancouver, B. C., some of our friends requested that we design and build such a vessel for them as soon as war conditions permit. We realized that although we had occasional quiet intervals between some of our government contracts and we had workmen whom we would be glad to have occupied temporarily on producing such a craft, the wartime prohibitions, particularly on the use of critical metals, practically blocked such construction.

However, there were no prohibitions upon planning such a boat, and the writer proceeded to amuse himself in recreational hours by study and production of the design of this little craft. Naturally, after the successful trials of the 38-foot over all molded plywood racing sloop, *Temptress*, which my son had produced, and encouraged by the success of the construction under the beatings that she took in hard blows and seas far beyond what would be expected of such a craft, we turned to the possibilities of molded plywood for the proposed motor boat and started our planning accordingly.

The Biological Society had a real problem in providing an anchorage, since their laboratory, near which the boat should be kept, was perched on a rocky cliff almost sheer from the sea with a tidal range of about 12 feet. The difficulty was overcome by building a boathouse overhanging the water on piers and beams anchored to the cliff, installing over the boat well a four-ton electric hoist to lift the boat up into the protection of this shelter. Of course, in too boisterous weather, this landing would be impossible and the boat then would have to seek a near-by protected cove. These limitations of space and weight therefore restricted our vessel to a length of 24 feet.

The final dimensions of the little ship were decided upon as follows: Length over all, 24′ 0″; beam, 8′ 1½″; draft, 28″. Lifting weight, about 6500 lbs.

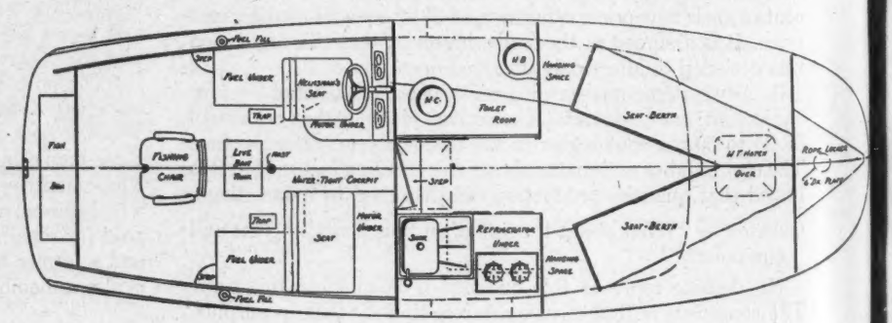
Slight depressions or tunnels in the hull over the twin screws were incorporated to keep the draft under 30″ in conjunction with the generous displacement considered desirable to have sufficient weight to avoid bouncing around in broken water.

As plenty of time was available before actual work could be started, the preliminaries of the design were given more than usual investigation and several models were made and given open water tests to observe their characteristics and then, by desirable alterations, develop a design that promised the best performance for the full size hull.

These models, one-sixth full size, were towed at a little less than half the speed desired for the 24-foot motor boat, at which speed all performances would be to scale and a true reproduction of the boat: *i.e.* waves made by the model would be in proper proportion, the trim would be the same angle as the parent ship would take and, by measuring the tow rope resistance, the necessary horse power for desired speeds could be calculated. This resistance experiment did not come within the scope of these open water experiments but was a laboratory job to be undertaken, if desirable, at the government model basin in Washington.

Photographs 1, 2 and 3 show the towing of these models. No. 1 was a combination of round bottom and V-bottom that proved unsatisfactory. No. 2 was a true V-bottom boat that performed well but had undue change of trim. This model, with slight modification of chine angle and deadrise, produced No. 3, which was accepted as a satisfactory solution. All of these pictures corresponded as closely as was practicable to a boat speed of 23 miles per hour.

On No. 3 it will be noted that a special spirit level was installed to measure the trim angle. The tow "rope" is at an angle



The interior layout follows the accepted arrangement and equipment of the better appointed sport fisherman, with accommodations for two

and with a point of hull attachment that corresponds to the shaft angle of the propelling machinery.

In designing this craft her more general use was considered beyond our client's special requirements, and about the most strenuous demands that we could imagine for her were as a fishing boat able to meet the varied conditions to be encountered in the Gulf Stream off the Florida coast. Of course, we realized that a somewhat larger craft would be more comfortable but, as we were restricted to a 24-foot length, we let the larger vessel be a dream ship for the future.

As the plan shows, the layout follows the accepted arrangement and equipment of the better appointed Florida sport fisherman, with accommodations for two persons.

The forepeak is partitioned off from the cabin by a watertight bulkhead and a watertight hatch over these forward quarters permits a man to stand on the transom seats and, through the open hatch, handle anchor or mooring lines without having to go forward on deck in bad weather.

Ample hanging space for clothing is provided, also stowage for suitcases under the seats. Toilet conveniences are shown and a small galley with sink, stove and ice box holding 50 pounds of ice. A forward tank will carry about 16 gallons of fresh water.

Headroom in the cabin is about 5′ 7″ and in excess of 6′ 0″ in the helmsman's shelter, where he has a well protected station and a clear view of the stern for coöperating with the owner when landing a large fish.

An added feature for operation in fog or crowded waters is a watertight sliding hatch in the roof of the shelter, over the helmsman, who, if he so desires, can open this hatch, stand erect and with his head well above the shelter roof have unobscured vision in all directions and still have the engine controls right at hand.

Fuel tanks are unusually generous and the fishing equipment includes either one or two swivel chairs, fish box and a live bait tank. Outriggers can be supplied for those who like to use them. For additional safety, the cockpit is substantially watertight and self-bailing with ample height to the top of the coaming to give needed safety when tumbled around in a choppy sea.

About this time in the development stage of the design, the government made available certain special priorities for building experimental craft, and this little ship is now under construction with such permission.

Photo No. 4 shows the solid wood mandrel over which the vessel was built. This form is planked or sheathed with nine layers of veneer, each layer with its adhesive being laid at an approximate angle of 45° to the keel line, and each at about right angles to the previous one. These laminations are secured temporarily one to the other by wire staples; when the mold is entirely planked, it is put into a large rubberized bag from which all air is extracted by a vacuum pump with the result that the atmospheric pressure of about 12 lbs. per square inch presses uniformly all the laminations tightly to the form. The adhesive up to this time is in a passive state, and to get adhesion the form with the bag is rolled into a large steel cylinder, generally called an "autoclave." The doors are closed and dogged tight, and then live steam of at least 75 lbs. pressure is introduced, with the result that this pressure of 75 lbs. over each

4.

This shows the solid wood mandrel over which the boat was built, the form being planked or sheathed with nine layers of plywood veneer, bonded by waterproof glue

square inch of the shell presses each skin tightly to the other and all more closely to the form. At the same time, the heat of this steam, over 300° F, sets in action the adhesive qualities of the glue with which each lamination has been inpregnated and, in addition, due to the heat, a chemical reaction is set up which makes this glue waterproof and fungusproof and, by its impregnation, practically eliminates the swelling and shrinking of ordinary lumber when subjected to alternate dampness and drying.

So powerful is the "squeeze" of the steam pressure that the shell emerges from the cooking so smooth that only the most moderate sandpapering is required before the application of paint. The planking and cooking is being done for us by the Allied Aviation Corporation, which has already produced from our designs a considerable number of similar craft, principally for government war projects.

Unfortunately, the twin screw Gray 50 hp. engines bought for this little ship have been requisitioned by the government and, as another pair will not be available until early spring, all trial trips must await that event.

This fishing boat is being built in the best possible manner with the assurance of many years of useful work. For safety and rigidity, the number of watertight bulkheads is more than what is usual in small craft. Extra seaworthiness is assured by the Luders round bow, a patented feature that has met with universal approval and has been adopted on many small government war craft. It assures dryness and seaworthiness which must be experienced to be appreciated.

Although the molded plywood hull is of nine-ply diagonal construction, and in spite of its improved strength over orthodox building methods, the shell is thicker than usual for planking in a craft of this size. A season's experience shows the improved rigidity and strength of this construction, its immunity from uneven swelling of putty and planking and the consequent reduction in cost of upkeep.

This design and construction has already aroused wide interest and, in response to numerous requests, it has been decided that, in addition to building this fish boat for its own customers, the Luders Marine Construction Co. will supply nested ship-

(Continued on page 156)

Models undergoing open water tests. Left, the round V-bottom proved unsatisfactory. Center, the V-bottom was good, but showed undue change of trim. Right, the accepted model

1. 2. 3.

WATERFRONT NEWS

A Low Priced Boat with a Welded Steel Hull, for Postwar Delivery

The all-steel boat at speed, showing how her chine construction tends to keep the bow wave low

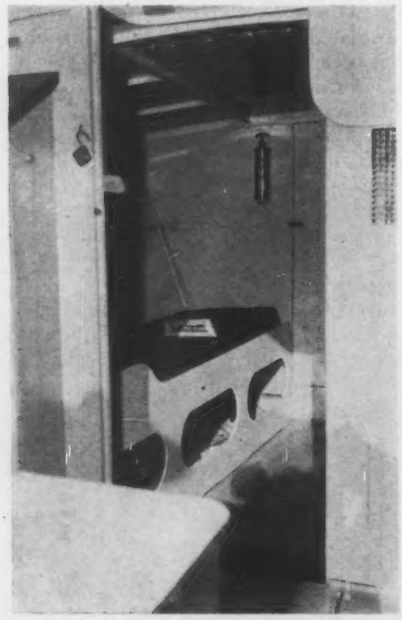
▶ For a number of years it has been the belief of Churchward & Co., of West Haven, Conn., that steel is the proper material for the construction of small boats. To prove this point, they designed and had built in the year 1935 a 26-foot steel hull that was christened *X-1* (meaning Experiment-1). In addition to serving for experimental purposes, she was turned over to the Coast Guard Reserve at New Haven, who used her during the winter months as an ice-breaker to keep a channel open, in which duty she did excellent service. During the ten years of her active career, she developed several small holes in her bottom plating. Mr. Churchward says that had the anticorrosive paints in use today, and with which the later boat was treated, been available when she was built, the holes would not have appeared. In any event, they seem to have been easily and permanently repaired by welding. Today, *X-1* is hauled out alongside the builder's shop and appears good for many years of additional service.

The boat whose pictures appear on this page has been christened *X-2* and she is new. Her general dimensions are: length over all, 26′ 0″; beam, 9′ 6″; draft, 2′ 5″. Her power plant is a 115 hp. Chrysler which drives her at 20 knots. The writer went for a spin in her in New Haven harbor late in November and was impressed by her excellent performance. In addition to a good turn of speed and satisfactory handiness, she had the advantage of an absolutely dry bilge. I had been led to believe that metal hulls were noisy but this one is not. Perhaps it is because her power plant is mounted on longitudinal wooden stringers which are hung in steel supports with a V-section from which they are insulated by a special grade of felt. Whatever the cause, the result is a remarkably quiet boat.

Another misconception that I had about steel boats was that they all tended to "washboard" or show their frames through their outer skins. I have seen a number of vessels in which this was true, but in neither of these boats could I observe any tendency in that direction. Mr. Churchward explained that this is because they had developed a method of welding that reduces or eliminates the locked-up stresses that arise when steel is subjected to the heat of the welding arc.

A third boat, the *X-3*, is now in the design stage. She will be of all-welded construction and will be built from preformed sheets welded to keel, chine and sheerstrake. The hull will be formed from six sheets of heavy gauge steel; two bottom pieces, two side pieces, a transom and a deck. It is their builder's intention to put these craft on a production line basis and to retail them at a price that will put them well within the reach of the average man. Combining the desirable features of seaworthiness, speed, comfort, dry bilges, easy upkeep and extremely reasonable first cost, one may look forward to seeing many of these "Steelcraft" cruisers.

An unusually commodious galley for a boat of her size is provided. The whole starboard side of the main cabin is given over to the cook



Above, accommodations for two are provided by upper and lower berths to port. The toilet is forward. Right, "X-2" rides on an even keel when running with wide open throttle

POSTWAR

PREVIEW

POSTWAR PREVIEW

THE marine industry did not wait for Pearl Harbor to prompt its change-over from peacetime to wartime production. Months before the United States entered the war, a substantial percentage of the pleasure boat builders, designers and manufacturers were concentrating on designing, building and manufacturing on behalf of the Allies. Since 1941, few if any members of the industry have been concerned with any activity other than "all out" production for the armed forces.

Today, despite the fact that the war is far from won, ultimate victory seems nearer and, while this very fact warrants even greater production efforts, it has also necessitated more than casual thinking about "the shape of things to come." In the pages which follow, YACHTING offers a comprehensive preview of the industry's postwar plans, materials and products. The fact that many familiar names are absent means only that they have not yet released such information. These details will, however, be fully reported in subsequent issues during the coming months.

Compact and efficient — an interior view of a postwar Richardson cruiser. (Interior by Robert Bingham)

CLINKER-BUILT CRAFT BY LYMAN

▶ Clinker-built boats, on which the Lyman Boat Works of Sandusky, Ohio, have specialized for nearly seventy years, will be put into production as soon after VE Day as government regulations permit. Plans announced by the company include a complete line of clinker-built inboard and outboard runabouts with hull designs following closely those of prewar models.

New high speed runabouts, with optional power plants, will be built in 16′, 20′ and 22′ sizes. In addition, Lyman will build an 18′ medium speed inboard designed primarily for fishing and trolling. Each of the inboard models, with the exception of the 16-footer, will be available in both the open runabout and "All-Weather" cabin types. All of these will be restyled and will feature many new ideas designed to add to passenger comfort.

Outboard runabouts will be built in 13′ and 15′ sizes. These models, too, will be clinker-built and have been improved from the standpoint of both eye appeal and performance. The balance of the line will include a combination rowing and outboard model and a new boat built expressly for motors of about 5 hp.

RICHARDSON "CRUISERS OF TOMORROW"

▶ Richardson's postwar plans are rapidly crystallizing into completed models and, although it is as yet impossible to specify a production date, this well-known organization has released details of one of the numerous new cruisers which will be in their peacetime fleet.

The preliminary specifications of the "Cruiser of Tomorrow" give an over all length of 25′ 3″, a water line length of 23′ 6¼″, a beam of 8′ 1″ and a draft of 23½″. This particular model will come in five different styles: open cockpit-utility; semi-enclosed-utility; sedan cruiser; covered cockpit-sedan cruiser; and a sports commuter. The hull, which will be built of molded plywood, has been designed by Sparkman & Stephens, while both superstructure and interiors are the work of Robert Bingham, well-known industrial designer.

"Interior fittings," say the builders, "will be modern, compact and interchangeable. Galley, dinette and berths come as units which may be installed or omitted to suit the individual taste. Interior arrangements provide sleeping accommodations for from two to four. New methods of construction will be employed and new types of materials will allow manufacturing savings and more economical maintenance. Brightwork, for example, will be kept to a minimum."

At this date Richardson is as yet undecided as to how many models will be included in their "Cruiser of Tomorrow" series, and no prices have been announced.

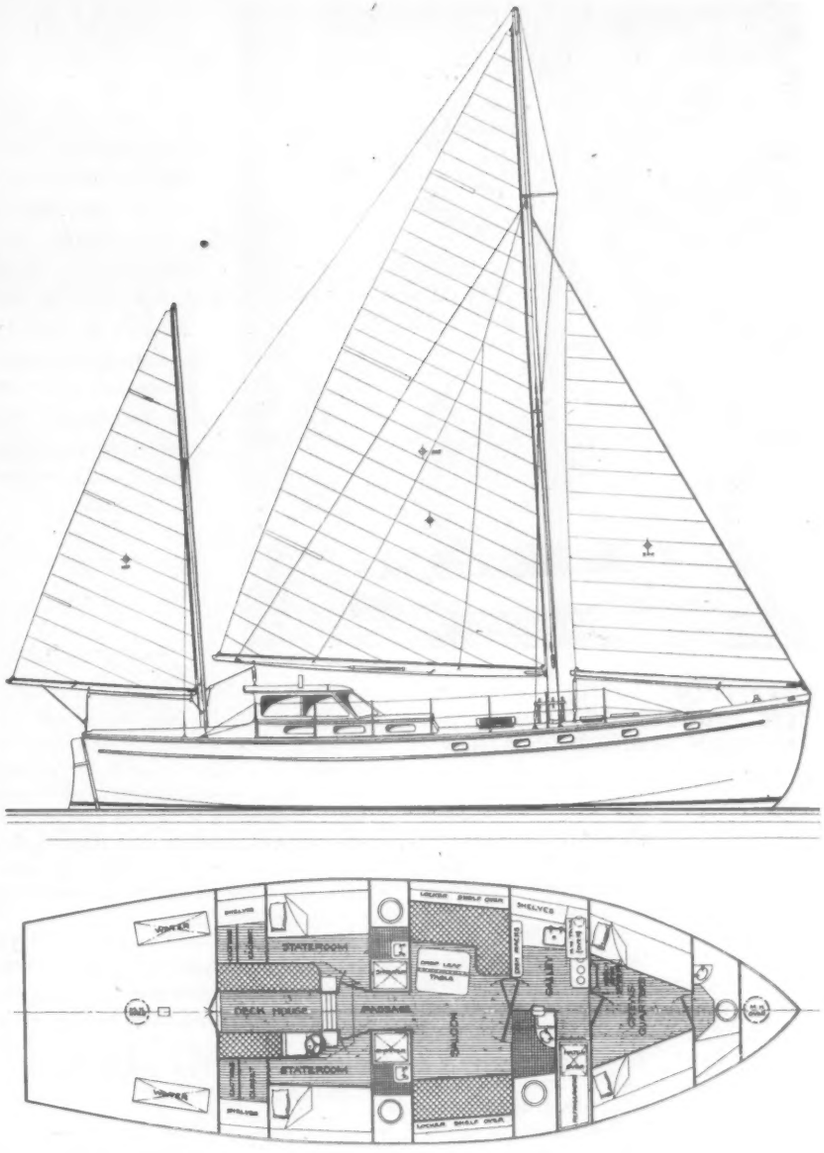
Left, the Lyman 22-foot clinker-built runabout with an "All Weather" top. The builders have planned a diversified postwar fleet of inboard and outboard models in sizes of 13, 15, 16, 20 and 22 feet. Power will be optional

GIBBS PLANS DIVERSIFIED FLEET

▶ The Gibbs Gas Engine Co., Jacksonville, Fla., has started a considerable amount of postwar designing work and a number of boats have been built for experimental purposes. They are planning a complete line of stock and standardized boats. These range in size from the 9′ Vee-Skiffs, which should make ideal dinghies, to a 50′ over all motor sailer. There will also be 12′ and 16′ Vee-Skiffs equipped with air-cooled motors; a 12′ sailing dinghy without motor; and the Gibbs Speedi-Skiff, 16′ over all, with a somewhat flatter bottom aft to permit the use of a larger power plant.

The Gibbs Utility Runabout, 18′ over all with a beam of 6′3″, will also be made almost completely of plywood and will be equipped with a motor of approximately 60 hp. to give her a top speed of around 27 m.p.h. This model will be characterized by a bottom that will be round forward and flat aft, thus combining the advantages of a planing vee-bottom boat with those of a round bottom boat forward. The 25′ power cruiser will be made in two models; a sport fisherman sleeping two, and a twin screw cruiser sleeping four.

There will also be other cruisers, the largest being the 50′ motor sailer with two complete staterooms, including showers, crews' quarters, galley, etc. She will have dual control for steering from either the doghouse or cockpit and will be rigged as a marconi ketch with ample sail area for good performance. Gibbs will also maintain a custom designing department and will bring out new models from time to time following the latest trends in development and construction.

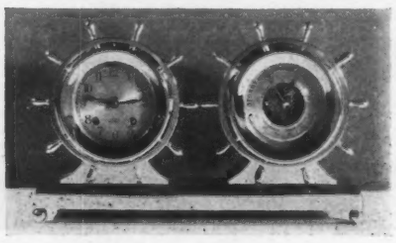


The Gibbs Gas Engine Co. is planning a complete line of stock and standardized boats. Above is its motor-sailer, which is 50 feet over all, with a beam of 17 feet and draft of 5 feet. Her total sail area is 890 square feet. Waterproof plywood will be used extensively in her construction. The power plant will be either a 165 hp. diesel or a 125 hp. gas engine

B-W SUPERCHARGERS

▶ Supercharging, tried and proven on the testing grounds of war, may provide horsepower plus for the postwar boat without great additional cost.

In contrast to the turbo superchargers which take planes into the stratosphere, the positive displacement supercharger is prepared for the job of reasonable and convenient extra horsepower. The B-W Supercharger unit — belt, gear or friction driven — put out by B-W Superchargers, Inc., Milwaukee, is compact and readily applicable to internal combustion engines with small tool cost. Functioning in direct relation to the speed of the engine, it provides extra horsepower at reduced speeds, giving the necessary extra drive without the need of reduction gears.



"TIMEKEEPERS OF THE SEA"

▶ The Chelsea Clock Company will resume civilian production as soon as war requirements permit. Early production will concentrate on well-known models such as "Marine," extensively used by the Navy for many years before the war; "Ship's Bell," with its pleasant striking tone, always popular with yachtsmen afloat and ashore; "Manhattan," a combination set in the popular ship's wheel design, for the instrument panel or cabin bulkhead; and "Claremont," for the library or yacht club mantel.

The Chelsea Clock Co's well-known "Timekeepers of The Sea" will be available as soon as civilian production is permitted. Here is the "Claremont" model

NEW HENDY DIESEL ENGINES

▶ The Joshua Hendy Iron Works, Sunnyvale, Cal., has been preparing for the day when engines can again be built for pleasure craft, and is working on a line of Series 20 engines, which will be offered in six and eight cylinders with a range of from 190 to 250 hp. These will be of the four-cycle type and will operate at a normal 900 r.p.m.; they will have overhead camshafts and unit fuel-injection systems. Electric or air starting will be optional and reversing will be by air. Reduction gears, cut on precision gear machines, are in ratios of 2 to 1 or 3 to 1.

Production of the Series 20 diesel will be rushed so that the two present models may be ready for the postwar building of yachts and commercial vessels.

Rosenfeld

Left, one of the Sparkman & Stephens "Voyager" one-designs. The designers have planned similar postwar boats for stock construction. They will be built to the Cruising Club rule, will have accommodations for one paid hand and will be suitable for ocean racing. Other stock one-designs will be smaller

HERRESHOFF SEES REDUCED COSTS THROUGH STANDARDIZATION

▶ The Herreshoff shipyard has completed its Army and Navy contracts and is now conducting tests with new materials and methods so that it will be ready to swing into yacht construction as soon as restrictions are lifted. Last year 64 high-speed power boats, ranging from the 63′ rescue boats for the Army Air Forces to 70′ torpedo boats for the Navy, were completed, a production average of one unit every five days. This wartime work has shown the economies effected by quantity production and Herreshoff Manufacturing Co. believes that standardization of yachts in the postwar period will go a long way towards reducing unit costs on high quality craft. This will encourage yachtsmen to accept one-design classes instead of demanding "tailor made" yachts.

Methods whereby original cost and maintenance charges can be reduced are now being developed through experiments and research. The company is also giving close attention to styling and eye-appeal which it believes will assume greater importance than in prewar days. But Herreshoff prophesies that radical streamlining will not be an important factor on the scene for some time.

Postwar plans may require the relocation of the company plant and Herreshoff is considering disposing of all, or part of its property at Bristol, R. I.

STREAMLINED 90′ YACHT BY INGALLS

▶ An interesting 90′ all-steel, all-welded streamlined yacht has been designed for the Ingalls Shipbuilding Corporation by George G. Sharp, New York naval architect, and will be built after the war at the company's Decatur, Ala., shipyard on the Tennessee River. Plans for the boat show streamlining carried to the point where all deck gear, even the davits for the 18′ motor launch, is concealed. The yacht will be fully insulated and equipped for air conditioning. Insulated Thermopane windows will enclose the lounge which is to be approximately 42′ by 19′.

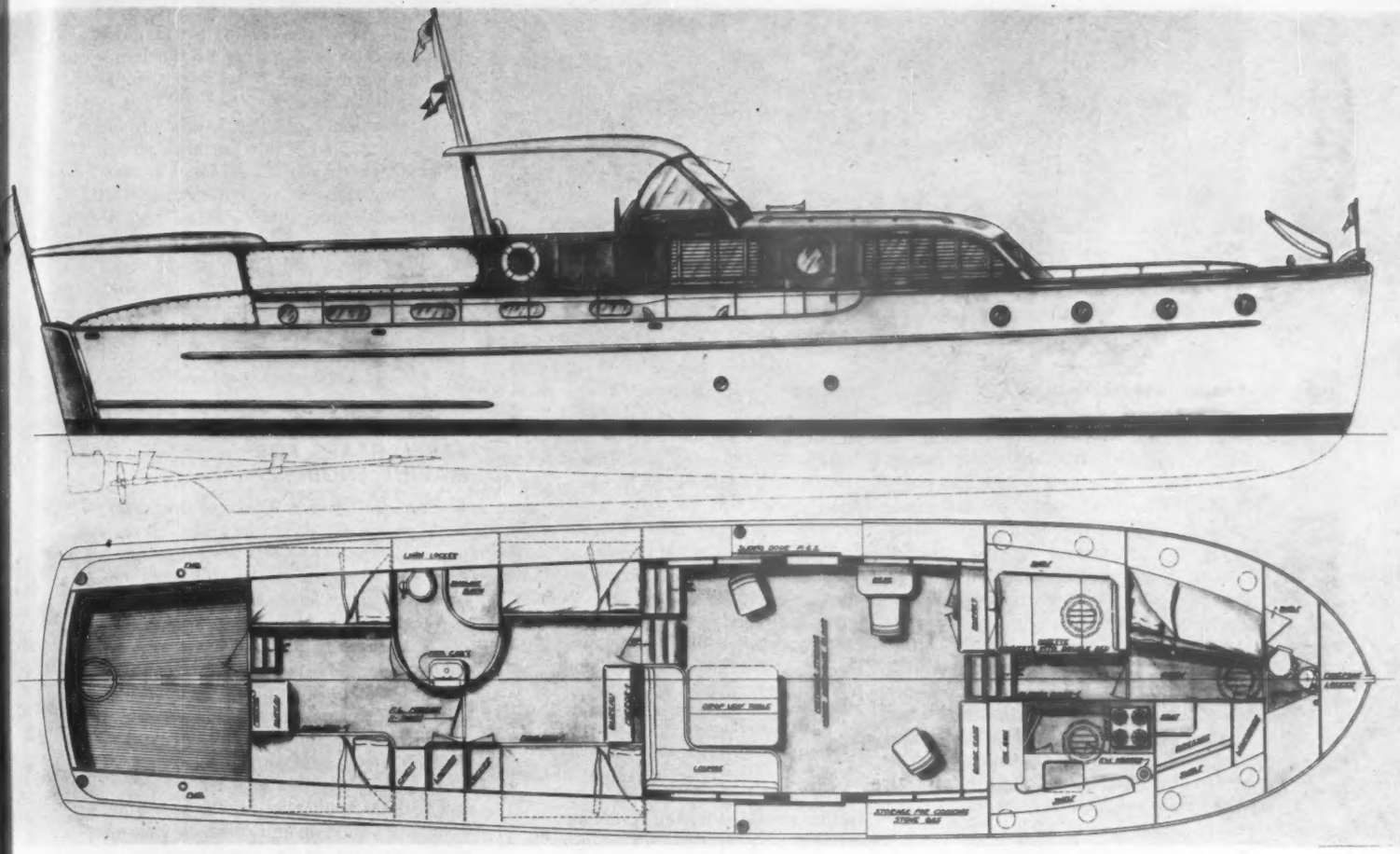
Below deck the boat will have accommodations for an owner's party of eight, maids' quarters for two, and for a crew of five. Staterooms will open onto a wide center passageway and each stateroom will have a private bathroom complete with tub and shower. Ample provision has been made for open lounge space. There is an open deck aft which can be used for fishing and the after part of the pilot house deck will also be unenclosed, while the forward part will be enclosed with one of the new type fluted glass windbreaks. The yacht will be diesel powered with two 200 hp. engines. Her top speed will be around 15 m.p.h.

SUPER-SIZED PLYWOOD PANELS

▶ One-piece plywood panels as large as 8′ x 50′ (and 1¼″ in thickness) are now being produced by the Haskelite Manufacturing Corp., Grand Rapids, Michigan. These one-piece Super-Sized panels are bonded with Phenolic resin glues in a single cycle, producing a uniform and stabilized panel of high structural strength. The panels are processed by the Plymold fluid pressure method assuring uniform gluing and allowing variable thickness when desired. The panels can be of plywood construction (Plymold) or plastic coated (Plastiply).

This panel offers definite advantages as one-piece boat planking and decks. The structural characteristics of the material eliminate the need of many ribs and other strengthening members. Although now limited through priorities, the production of these panels will be keyed to the demands of the marine industry as soon as restrictions are lifted.

Queen of the Ingalls Shipbuilding Corp's postwar fleet is this 90-foot, all-steel, all-welded yacht designed by George G. Sharp. She will be powered with two 200 hp. diesels to give a good cruising speed



The largest of Chris-Craft's designs for postwar construction is a 60-foot cruiser which can be handled easily by two men. Her accommodations are unusually complete and commodious, the deckhouse alone being over 15 feet in length. Twin screw, she is capable of speeds from 16 to 18 m.p.h. Planned power will be either twin gas or diesel motors of 130 to 165 hp.

NEW CHRIS-CRAFT

▶ One of the most recent Chris-Craft designs for postwar production is a 36′ double stateroom enclosed cruiser. Fishing enthusiasts will like particularly the large, open cockpit partially protected by the extended cabin roof. She is 36′ over all with a beam of 11′ 3½″. Construction features include white oak structural framing and brass fastenings. The bottom will be double planked and the sides batten seamed. Sleeping facilities provide accommodations for six persons, two each in three individual cabins.

The forward cabin provides a guest stateroom with permanent upper and lower berths, a wardrobe, shelves and seat. Abaft the forward cabin is a toilet compartment to starboard, complete with toilet, medicine chest, wash bowl and linen locker. Opposite, to port, is a dinette. For sleeping purposes this converts into a double bed. The galley on the starboard is replete with sink, two burner stove, dish locker, ice box and silver drawer. Two steps lead up to the bridge or deckhouse. It is furnished with carpet, venetian blinds, comfortable studio lounge and drop leaf table. Opening windows and drop sash screens are standard equipment. Controls are forward on the port and insure maximum vision with ease of handling. Several engine options, including twin screw, are planned for the new 36-footer. Anticipated top speed will be about 23 m.p.h.

Chris-Craft is also taking orders for a new 60′ cruiser which is small enough to be easily handled by one or two men. The plans show a well proportioned hull and superstructure with pleasing lines and

Chris-Craft's 36-foot double stateroom enclosed cruiser is an ideal craft for the fisherman. Several engine installations, including twin screw, will be available. Maximum speed is 23 m.p.h.

Compact and efficient, the Mount Desert Boat Yard's 32-footer is available either as a cabin boat or an open launch. She is one of five types of craft from this well-known New England builder

a flying bridge. Briefly, specifications call for a 60′ over all length with 14′ 4″ beam and freeboard of 90″ and aft of 57″. Construction specifications include a double planked bottom with batten seamed sides, brass and bronze fastenings in addition to hardware of the same material. Planned power equipment offers Chris-Craft reduction geared marine motors, 130 or 160 hp., or twin diesels, 165 hp. each, with corresponding top speeds of 16–18 m.p.h.

A particularly practical feature of the 60-footer is the enclosed companionway leading to the bridge from the main deckhouse. This permits access to the bridge without going outside, a decided advantage during wet weather. Crew quarters (or an extra guest stateroom) are forward of the main saloon, complete with a private toilet and shower. Aft is the galley and dinette — the latter convertible into a double bed. The deckhouse is unusually large and roomy, being 10′ x 15′ 6″.

In addition to the enclosed companionway to the bridge, sliding doors to port and starboard open onto the catwalk which give access to the forward deck, bridge or after cockpit. Two cabins abaft the bridge provide for two persons in each. They are complete with dressers, linen lockers and all the necessary conveniences. A large toilet compartment with shower, lavatory and locker adjoins the two staterooms. Optional equipment of individual toilet compartments is available if desired. Aft of the staterooms is a large, open cockpit with spray shields and canopy top.

MOUNT DESERT TO BUILD FIVE STOCK BOATS

▶ The Mount Desert Boat Yard, Inc., has prepared designs for five postwar boats, including the Maine Coast 36-footer (plans of which appeared in YACHTING for November, 1944). The facilities of this yard at Somes Sound and Northeast Harbor have been greatly increased, and the men who have been turning out boats for the British and the United States Navy will be ready to go to work for yachtsmen after V Day. The present plans include the following craft:

The Mt. Desert Pram — length 9′ 9″; beam 4′ 2″. This is a pram especially designed by E. F. Butler for his personal use. It is extremely able, tows perfectly and stows aboard very easily. It has great initial stability. The Mt. Desert Dinghy — length 10′ 8″, beam 4′. This boat is a round bottom carvel planked boat designed for easy rowing. A 32′ power launch — a typical Mount Desert fishing boat model, available as a cabin boat or open launch. A 35′ cabin cruiser — an exceptionally easy boat to handle, basically modeled after Maine fishing boats. The Maine Coast 36-footer mentioned above will not be a stock job. Sails, hull, spars and rigging will be identical but owners may specify cabin arrangement.

POSTWAR FIRE PROTECTION

▶ With the release of high-priority material and the completion of war contracts, pleasure boats will be able to avail themselves of the up-to-the-minute fire protection provided by the Kidde automatic extinguishing system, an outgrowth of the Lux-O-Matic, which has been developed and improved for the protection of military and naval craft. These advances will be made available to the owner who wishes to equip a new boat or to modernize an old one.

The Kidde automatic system for yachts and motor boats will incorporate a new and highly efficient valve, known as the flood valve, which is capable of delivering greater quantities of the fire-smothering carbon dioxide gas per second. Carbon dioxide leaves no mess and damages nothing with which it comes into contact. It is stored under high pressure in a steel cylinder which can be located in any convenient space. Small craft, whose built-in fire protection usually covers engine and bilge spaces, require, in general, one cylinder containing 35 or 50 pounds of highly compressed carbon dioxide. Upon release this expands to 450 times its stored volume, and the non-toxic gas is driven by the force of this expansion into every crack and cranny, snuffing out fire by cutting off its oxygen.

This fire-extinguishing system needs a minimum of care. Carbon dioxide does not freeze, deteriorate or corrode its equipment. Annual inspection and weighing of cylinders, to make sure the charge is intact, constitute the bulk of maintenance necessary. The Kidde automatic extinguishing system for yachts and motor boats is the little brother of the larger systems which guard cargo vessels, tankers and ocean liners.

Another item of interest to boat owners will be improved Kidde portable carbon dioxide fire extinguishers. Due to wartime development of lightweight steel cylinders as containers for aviators' breathing oxygen and carbon dioxide, these portables will be much lighter and easier to handle than those hitherto available. Their streamlined design includes a trigger release which permits easy operation with one hand, "firing" only the amount of gas necessary to smother a blaze as easily as one would fire a pistol.

Postwar Kidde carbon dioxide extinguishers will have lightweight steel cylinders and a streamlined trigger release

BEVEL GEARS FOR MARINE ENGINES

▶ From the Gleason Works, of Rochester, N. Y., come details of numerous interesting applications of bevel gears in marine engines. Many of the installations described have been made in high-speed Army and Navy craft. In one case, a pair of spiral bevel gears operating at a small shaft angle forms a "Vee" drive direct from the power plant to the propeller. This permits the advantageous horizontal mounting of the motor in the stern of the boat for the most effective distribution of weight and utilization of space.

The other application is a straight line, planetary reduction unit, valuable where a small, compact, in-line, speed reducer is needed. Similar units have been used for reverse drives, permitting rotation of the propeller in either direction, with the same direction of motor rotation. An important war time use of this drive has been in the various types of Army Air Force's air-sea rescue boats.

A third use of bevel gears in marine power transmission is the so-called "inboard-outboard" arrangement. With this system, the motor is mounted inside the boat, and one pair of bevel gears within the boat provides a right angle turn for the power into a vertical shaft. This shaft, in turn, through another pair of bevel gears outside the hull, transmits the power through a horizontal shaft directly to the propeller.

Benj. Stephenson

The "Offshore 48," one of the Huckins postwar Fairform Flyer fleet. With twin Gray diesels mounted in the stern to assure the minimum of engine noise, she cruises at 21.3 knots and has a top speed of 25.5 knots

FAIRFORM FLYER FLEET TO BE MOLDED

▶ The postwar Fairform Flyer Fleet will be newly designed from keel to truck to embody the technological improvements developed in the construction of the Huckins PT. New materials and methods used in building boats to win the war are expected to give yachtsmen better boats at lower cost than the prewar models.

The full-planing, non-pounding form of Quadraconic hull, with its speed and fuel consumption characteristics, will be retained. All hulls will be constructed of laminated molded mahogany, triple and quintuple planked, bonded with hot-polymerized phenolic formaldehyde plastic and fastened with bronze and monel. Hulls will be built upside down and "cooked" into a one-piece unit. The present plan calls for speeding up production and reducing costs by producing the stock models on mandrels with a capacity of one boat per day per mandrel. A test hull, which has been in operation for two years, has been subjected to every conceivable type of abuse.

Huckins plans to build seventeen models including four stock boats ranging in over all length from 28′ to 34′. The largest model now contemplated is the "Overseas 100." There will be a wide variety of roomy interior arrangements worked out for the convenience of owners. The Huckins Yacht Corporation is building a new waterside plant on the Ortega River at Jacksonville to be known as the Florida Marina.

THE NEW JOHNSON "27"

▶ A 27′ 6″ water line sloop has been designed by Phil Rhodes, of Cox and Stevens, for Hubert S. Johnson, of Bay Head, N. J. Designed to be fast and comfortable for cruising, she will fit in the Jersey Coast Ocean Racing Class.

The general dimensions are 39′ 10″ on deck, 27′ 6″ water line, 10′ 8″ beam and 4′ 4″ draft. She will be of the centerboard-keel type. The weighted keel will be of lead. The specifications call for oak keel, stem, floors and deck beams, mahogany planking, canvas over Weldwood on the deck, teak cockpit floor. All fittings will be of brass or bronze and all exterior and interior trim will be of mahogany.

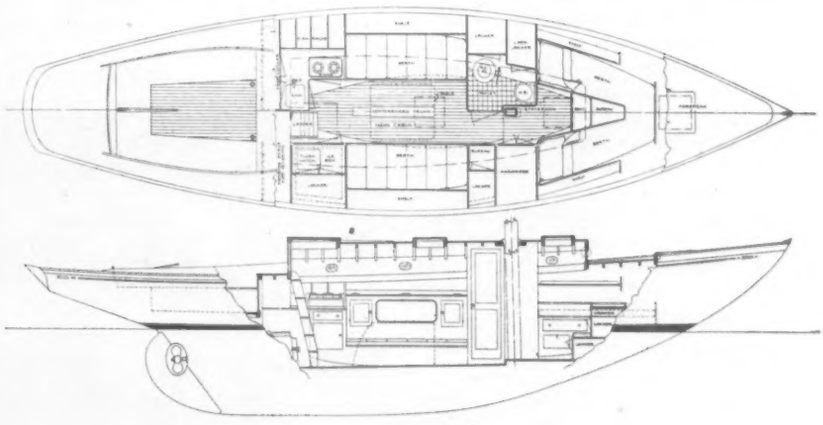
For comfort below, it is planned to use Airfoam mattresses covered with high grade material. Large lockers and storage space are provided, as well as plenty of sail storage space forward. A Gray 4-22 auxiliary motor will be equipped with an extra 12 volt generator.

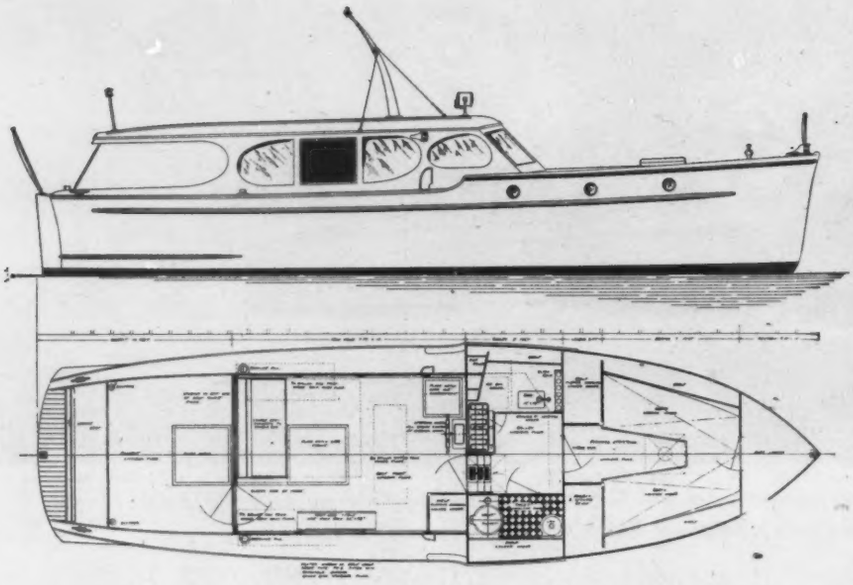
"SKIPPER SERVICE"

▶ The kind of service every skipper wants is promised to owners whose home port is near Wickford, R. I. The shipyard operated by Perkins & Vaughan, Inc., is located in this attractive little harbor on Narragansett Bay and the members of the firm, being knowing sailors, have devised a plan for eliminating the usual service problems for the man who wants his boat maintained in first class condition and who has neither the time to do the job himself nor employs a professional to do it.

"Skipper Service" will keep boats in first class condition week in and week out so that a business man who does his sailing over the weekend can step aboard on Friday night or Saturday and find topsides and brass gleaming. If painting or varnishing is needed, the yard is well equipped to do the job.

P. L. Rhodes had designed this 27-foot water line centerboard sloop for quantity production by Hubert S. Johnson of Bayhead, N. J. She will be powered by a Gray 4-22





A wholesome and roomy 40-foot sedan cruiser which Hutchinson's Boat Works, Alexandria Bay, N. Y., will build for a Canadian yachtsman. She is powered by a Chrysler Royal of 141 hp. with reduction gear

HUTCHINSON'S PLANS FOR POSTWAR

▶ The facilities of Hutchinson's Boat Works, Inc., of Alexandria Bay, N. Y., were greatly expanded to handle their Navy construction. In the postwar period the plant will be equipped for every type of yacht design, construction, alteration and repair, and with an eye to the future the following plans have already been prepared:

A 40′ sedan cruiser whose principal dimensions are: length 40′, beam 11′3½″, draft 3′. She will be powered by one Chrysler Royal reduction gear engine of 141 hp. This boat is for a Canadian yachtsman whose requirements were for a wholesome type of cruiser, with plenty of room for two to four persons to cruise in comfort.

A 26′ fisherman powered with a straight drive Chrysler Royal 141 hp. engine. Construction will start on three of these boats as soon as materials are available.

A 22′ stock utility runabout powered with a Chrysler Crown 110 hp. motor. She is staunchly built and is designed with special emphasis on the needs of the fisherman. Construction and finish are to be of the highest grade, with Mexican mahogany hull, decks and trim. Among her many features is a system of Weldwood web and steam-bent frames, with a new system of lap strake planking and a folding top that is entirely out of sight when not in use and is instantly available when needed.

A 26′ utility runabout which is a larger edition of the 22-footer described above, with the same system of construction and features. Power is furnished by a Chrysler Royal 141 hp. engine.

As a stock model, Hutchinson is planning to build a 22′ round bottom lapstrake utility boat powered with a Chrysler Crown 110 hp. motor.

A Hutchinson runabout of which postwar models will be built in 22- and 26-foot lengths. They will be powered by Chryslers

PENFLEX HOSE AND TUBING

▶ The first extensive naval use of Penflex flexible metallic hose and tubing occurred during World War I when these were employed on submarine chasers and auxiliary craft. The wide consumer acceptance which Penflex products now enjoy is due in large measure to simplicity of installation, elimination of sharp bends or elbows, lower back pressure with consequent increase in motor efficiency, the tendency to muffle the noise of exhaust, and the vibration-absorbing characteristics of interlocked construction. In addition, air-jacketed exhaust pipes ventilate engine rooms through induction.

Penflex interlocked flexible all-metal hose is used for diesel exhausts and air intakes; Penflexweld tubing of corrugated seamless construction, for fuel oil and starting air lines. These products are manufactured by the Pennsylvania Flexible Metallic Tubing Co., Philadelphia.

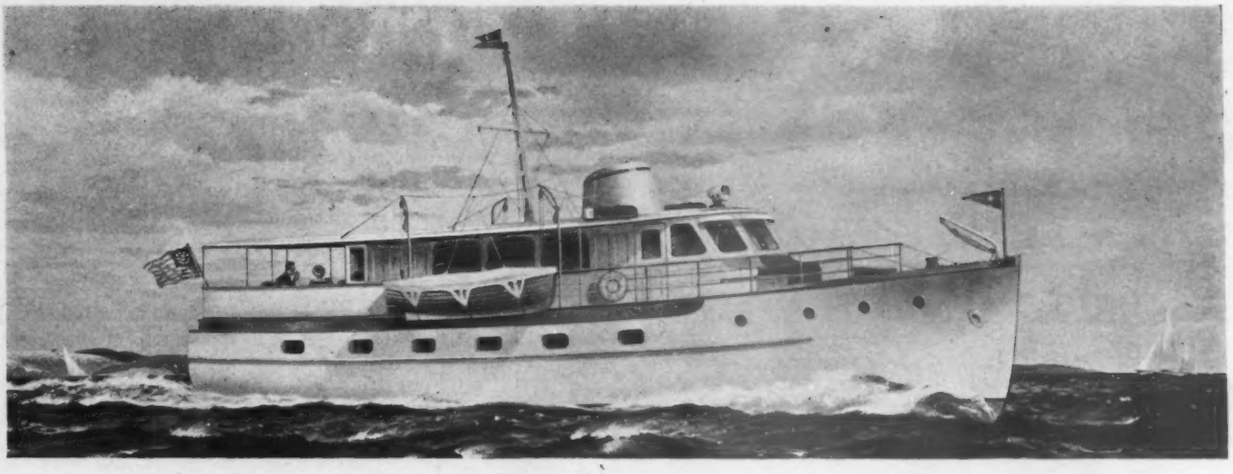
FOSTER BOAT COMPANY

▶ Postwar plans of the Foster Boat Company, Charlevoix, Mich., call for the return to civilian production on two initial models. Others will be resumed as reconversion progresses. Emphasis will be on a 24′ stock cabin cruiser. Gracefully but not radically streamlined, she achieves her up-to-the-minute appearance without sacrifice of practical considerations. Particular attention has been given to cabin arrangement. Equipment is compactly and handily arranged to leave a maximum of living space, and cabin height is unusually great — resulting in a roominess heretofore found only in larger craft. The builder has not yet announced prices, but states that mass production methods will place this model well within the reach of the average boat buyer. In the smaller field, Foster will present a dinghy equipped for rowing, sailing or out-board-motoring.

The Canvas Division of the Foster Boat Company, located in Petoskey, Michigan, will produce life jackets, boat covers, tarpaulins, sails and other marine canvas articles. Boating accessories to be offered include oars and anchors. Oars are produced in the Charlevoix plant from specially selected logs cut in the company's sawmill and will be manufactured in stock lengths up to 10 feet. Anchors will be of the "mushroom" and folding Navy styles in 10, 15, 20 and 30 pound sizes.

CAMPBELL PLANS STEEL AND PLYWOOD BOATS

▶ The Campbell Boat Co., of Holland, Michigan, well known for the construction of custom-built yachts, plans to utilize its wartime experience in welding steel equipment to build a limited number of steel yachts of various types. Skilled men who have been turning out such items as stacks, depth charge racks, antenna supports and other weldments, will be available to work on the steel yachts. Cruising boats made of plywood are also on the schedule. According to the company's present plans these are to be similar to the MacGregor "Threesome" built some years ago. Although the emphasis will be on custom building as in the past, the company plans in addition to enter the small boat field with the construction of Lightnings and other popular small one-design classes.



This 55-foot diesel yacht, a standardized model to be constructed by John Trumpy & Sons, will rival the builder's prewar 69- and 70-footers. Two 75 hp. 6-cylinder diesels will give a speed of 12 m.p.h. She can accommodate a party of four or more and a crew of two

TRUMPY'S 55' DIESEL YACHT

▶ The new 55-footer by John Trumpy & Sons, Gloucester City, N. J., one of the first of the postwar yachts for which plans and specifications have been completed, is a fine example of spaciousness and excellent lines. A careful study of her plans shows that she will rival the builder's prewar 69- and 70-footers.

The hull design should make for seaworthiness and economy of operation. Her two 75 hp., 6 cylinder, 4 cycle diesel motors will give her a cruising speed of 12 m.p.h. In the entire plan, the emphasis has been on comfort both below and above deck. The main deck extends without a break from stem to stern and has full headroom. On this deck there are two double staterooms for the owner and guests, with a bathroom between the two with hot and cold water, a shower and an electrically operated toilet. Opposite the port stateroom is a dinette with a built-in sofa which opens into a lower and upper berth to accommodate additional guests. The galley is conveniently located amidship, just forward of the dinette, and will include an electric refrigerator and gas stove.

Forward of the owner's quarters, and separated from them by insulated bulkheads, is the engine room which also houses fuel tanks, batteries and auxiliary machinery. Instead of a gasoline driven generating set the designer has specified a 32 volt, 1500 watt generator to be attached to the port motor. Bilge pump, fresh water pressure pump and compressor for the refrigerator are all operated through the switchboard from the generator or storage battery. The welded steel fuel tanks will have a 350-gallon capacity. The forecastle provides exceptionally comfortable quarters for a crew of two.

One of the features of this cruiser which should make for comfort during summer, or if the yacht is used in southern waters, is the Trumpy watertight rectangular sliding ports installed throughout the owner's quarters. Each of these is said to provide as much air and light as three 9" round ports.

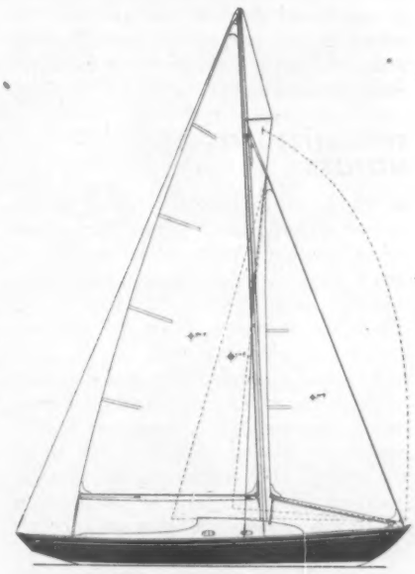
Specifications for the cruiser provide for white oak for keel, framing and deckbeams, long leaf yellow pine for planking, and waterproof plywood for bulkheads. decking and flooring. All wood is to be coated with Woodlife preservative. Handrails, bulwark capping and outside trim are to be of Mexican mahogany. Planking is to be bronze fastened.

THE SAYBROOK "SAILERETTE"

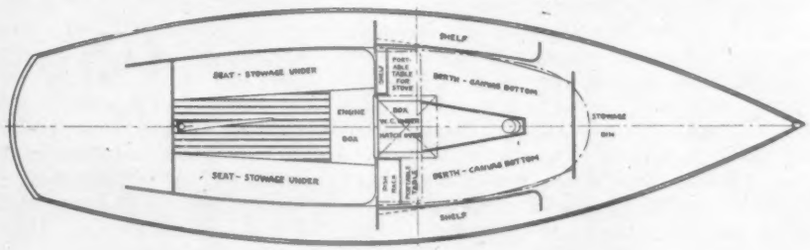
▶ The "Sailerette" has been developed by the Saybrook Yacht Yard, Inc., of Saybrook, Conn., to fulfill the requirements of the skipper who wants an economical boat for afternoon sailing or short weekend cruises. Major consideration has been given to smart handling and enough speed. No attempt has been made to give luxurious accommodations in a small boat, although simple and compact cruising comfort has been attained.

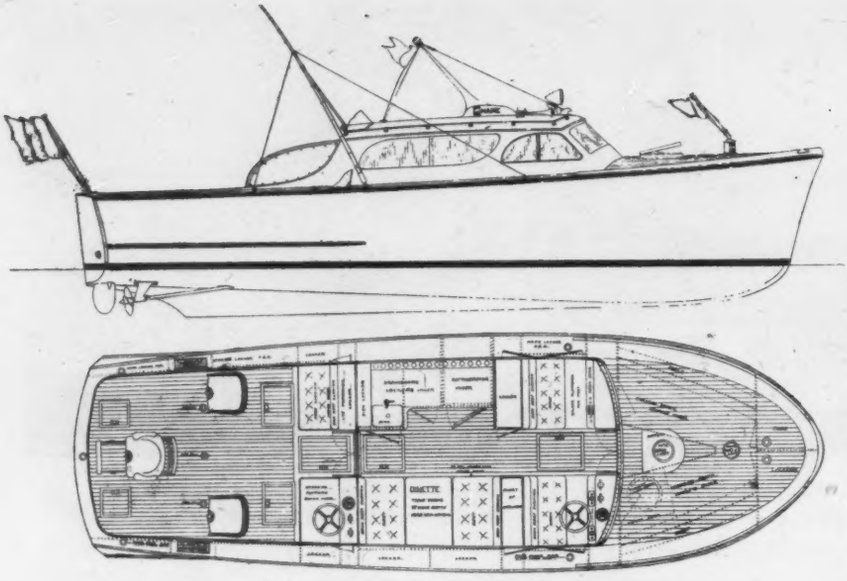
The basic design is a day sailer with a small open cuddy. She is 26' overall, 18' 4" water line, 7' 6" beam and 4' 2" draft. Displacement is as light as practical. The cuddy is without bulkheads or interior arrangements and provides stowage space for sails and other loose gear. The cockpit will have ample seating capacity for four persons. The working sail plan is as simple as possible and can be handled easily by one person.

An experimental "Sailerette" is now under construction, and is being built with the conventional hull framing and planking. After she has been thoroughly tested, production will probably be started on molded plywood hulls. The underbody is of the fin keel type and rudder and keel may be removed for easy shipment or storage. The cuddy, or deckhouse, on the experimental model is being made of molded plywood. Another alternative is an aluminum alloy house.



Ideal for cruising or day sailing is the Saybrook Yacht Yard's new 26-foot auxiliary. Of light displacement, she will have a molded plywood hull





Morton Johnson's new 35-footer has been designed with three different arrangements so as to meet the requirements of both the yachtsman and the sport fisherman. With either carvel or lapstrake construction, she will have a wide range of power and speed

In order to give cruising accommodations, a bulkhead is built at the after end of the deckhouse with doors opening into the cockpit. The cabin bulkhead is watertight to a point above the water line. Thus, it is possible to ship considerable water in the cockpit without danger. The interior can be fitted with two built-in berths or pipe berths, a small, compact galley and a toilet. There is comfortable sitting headroom. A small, air-cooled motor may be installed just abaft the cabin bulkhead.

The boat is so designed that all these additions in the way of accommodations may be added after the first few years the boat is in use. The bare essentials may be purchased the first year and the rest added as the pocketbook permits. The first "Sailerette" will be ready for trials early this spring.

SPECIALIZED ELECTRIC MOTORS

▶ The Electrical Engineering and Manufacturing Corp., Los Angeles, Cal., is now manufacturing highly specialized splash proof electric motors, submersible bilge and fuel pump motors, inverters, motor drives and actuators which will find extensive use in postwar craft.

A typical example is the sealed vapor-proof motor which can operate winches, hoists, blowers, bilge pumps and similar equipment. Models being built now are of the 2½ hp., D.C. continuous duty, totally enclosed type. Integral gear reduction of 3.8 to 1 is provided, to give an approximate r.p.m. output of 2400. Overload capacity is 150 per cent for about 15 minutes. An internal fan cooling system is designed as part of the unit, with a built-in external fan forcing air over heat exchanger tubes of the internal cooling system. Such motors could be wound for either 32 volt or 110 volt D.C. This standard model, with little or no change, has many future application possibilities where prevention of damage from salt spray and sea corrosion is paramount, total utility is almost unlimited and it may be redesigned to fit individual tasks.

The splash-proof inverter is particularly suited to marine conditions. This unit will convert 32 volt D.C. current into 110 volt 60 cycle A.C. current. This totally enclosed fan-cooled model is 350 volt amperes capacity, continuous duty type, with 900 volt amperes peak capacity. It could be adapted for use with a power supply source of 110 volt D.C. and would be particularly useful on boats having D.C. power supply and yet needing a small amount of alternating current for the operation of standard commercial electrical appliances.

Now in the planning stage for peacetime production, the engine starter generator for marine engines is another interesting example of postwar power packs.

CAPE COD TAKES OVER LAWLEY SMALL BOAT FLEET

▶ The Cape Cod Shipbuilding Corp., of Wareham, Mass., has recently completed a sales contract with George Lawley & Sons Corporation, whereby they have purchased the entire building rights to the line of small sailboats developed by the latter organization in the years just prior to the war. This list includes the Lawley 110, now known as the National 110, the Lawley 225, the Lawley 15′ sloop, and the Lawley 8′ pram (both rowing and sailing models) which was designed by the late Charles MacGregor.

When Lawley became totally engaged in all-out war work in 1940, the forms were moved to the Cape Cod Shipbuilding yard on a lease agreement, chiefly to enable owners of these boats to get a continuous flow of replacement parts.

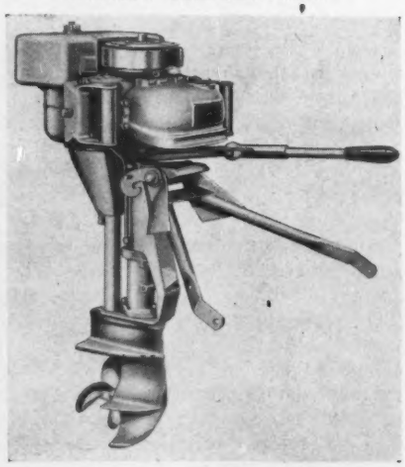
The Cape Cod Shipbuilding Corp. suggests that owners of any of the above mentioned boats will get much quicker response to their correspondence regarding new boats and replacement parts if such letters are addressed to Cape Cod Shipbuilding Corp., Wareham, Mass.

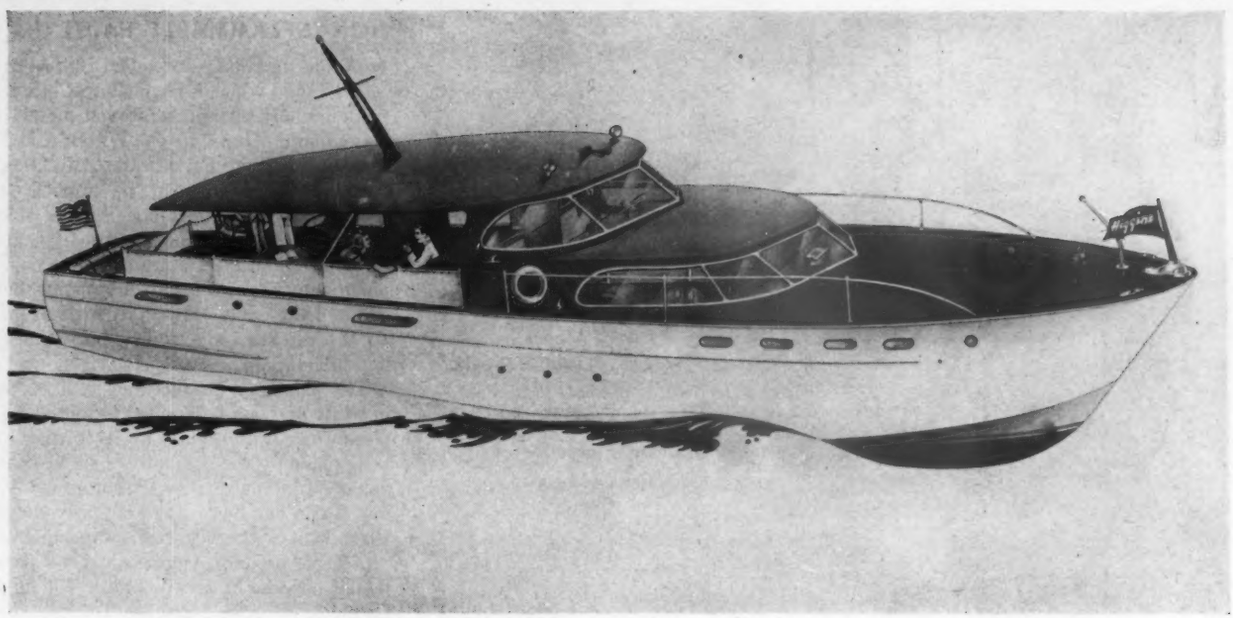
"SUPER-SERVICE" FOR OUTBOARD BUYERS

▶ Evinrude's initial postwar models will present no radical departure from present designs. The manufacturers state that, "Our prewar models were very highly developed mechanisms for the service intended. From the start of war production, in order to give the Army and Navy the finest, most advanced motors that could be built, we tossed overboard every inhibition and restriction of traditional engineering practice. The sky was the limit on experimental development. Many new applications of outboard power had to be solved and perfected. But as far as the basic mechanism is concerned, the accepted, proven principles are the ones which stood up and delivered the goods. The highly successful war model Evinrudes are fundamentally the same as other Evinrudes. Even the exceptionally powerful and rugged Storm Boat model represents no radical departure in production technique from the standard four-cylinder models in the Evinrude line. While the war has developed no 'dream motors,' postwar Evinrudes will incorporate many refinements tested and proved in the toughest service to which outboards have ever been subjected."

One prospective development which Evinrude considers highly important to the future of the sport is a nationwide stepping up in expert service to boatmen. The Evinrude Service School, staffed by factory experts and supervised by Army engineers, has been in operation since the start of the war. Many companies of resourceful mechanics have been trained there who will inevitably gravitate to service jobs in the boating industry after the war.

Evinrude's "storm boat" motor





The Higgins 55-foot yacht, the largest of its diversified fleet of postwar pleasure boats. The smallest is a 12-foot molded "car top" boat, either light or medium weight, which may be rigged for sailing

HIGGINS POSTWAR PLEASURE FLEET

▶ The recently announced Higgins postwar pleasure fleet includes no less than twenty-one different models, which have been designed for every type of boating interest and every size of pocketbook.

Group One, which consists of rowing and outboard boats, includes 12′ molded car top boats, light weight and medium weight, with available sailing equipment as an extra; and a 16′ molded open runabout for outboard power.

Group Two, inboard powered runabouts and utility boats, includes 16′ standard runabout, seating five; 17′ and 19′ deluxe runabouts with double cockpits, seating six; 23′ special runabout with triple cockpit and seats for eight; and 22′ utility models seating six or more.

Group Three is comprised of cruisers including 26′, 30′ and 34′ sedan cruisers, 30′ and 34′ sports fishermen; 40′ double and triple cabin cruisers; a choice of two 45′ cruisers and a 55′ yacht. Accommodations in the boats in Group Three range from four to eleven persons, made possible by a variety of arrangements.

Further details will be released at a later date.

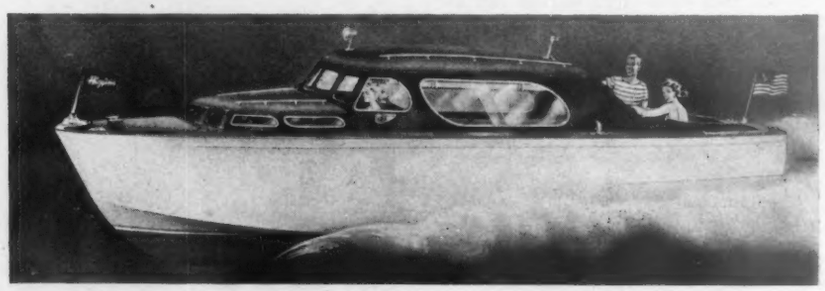
SPERRY STEERING SYSTEM AND GYRO-COMPASS

▶ Yachtsmen will be interested in Sperry's Mark XVIII gyro-compass, developed for the Navy's fleet of small invasion vessels, even though it is not as yet adapted for use on the average small boat.

The compass stands at normal height, is only 19″ in diameter and, except for the voltage regulator and the repeaters, all equipment including the control panel, amplifier panel and motor generator is contained within the binnacle. The repeater system is the same as in the larger Sperry Mark XIV. When space is restricted the binnacle is split into upper and lower halves and placed in different locations on the ship. The top half with the sensitive element, the rotor and mechanism that actually do the job, is installed in one place, and the bottom half, with the control and amplifier panels, filter and motor generator is placed some distance away.

Sperry has also developed an electro-mechanical steering system that is now being used in fishing trawlers and other comparatively small commercial boats. The same wheel is used for hand and electrical steering, the rotation of the wheel actuating the steering engine motor. The steering engine has a magnetic clutch on the motor shaft which opens instantly when the power is interrupted or when a change-over is made from electric to manual steering. The opening of the clutch disconnects the motor from the rest of the steering engine and makes it possible for the helmsman to move the rudder freely with the steering wheel.

The Higgins "Junior PT." She is 26 feet over all and is capable of high speed

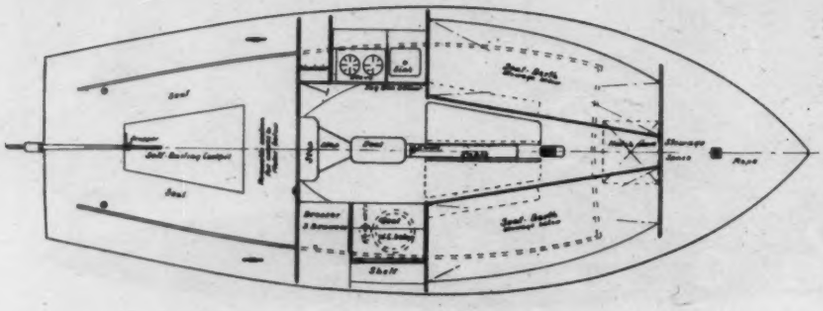


FORMICA PANELING

▶ In postwar yachts, Formica will undoubtedly find wide use for paneling in toilet rooms, cabinet tops in galleys, door paneling in cabins, and tops for stateroom and cabin furniture. This material is light (specific gravity 1.35) and sufficiently flexible to be uninjured by vibration. There is a wide range of colors and patterns, as well as "Realwoods" in which a veneer of genuine wood is introduced into the panel under a transparent sheet of plastics, which in turn is covered with a hard shell of colorless plastic resins.

The sheet is not absorbent and will not take up stains. It is inert chemically and will not be injured by cleaning alkalies, fruit acids, alcohol or other solvents.

For cabinet tops and furniture tops it is glued with casein glue in a veneer press to plywood. The same method is used for paneling of the flush joint type. In toilet rooms where cover strips are employed, it is provided in the form of a 5/32″ sheet on a center of press tempered masonite. Some of the more popular woods which are used in the form of veneers to produce "realwood" are lacewood, prima vera, mahogany, walnut, zebrawood, maple teak and macassar ebony. Almost any obtainable wood can be processed. Formica is manufactured by the Formica Insulation Co., Cincinnati, Ohio.



Ventnor's "Twosome" is another proof of the potentialities of the "small boat." With accommodations for two, she is 21 feet over all. There is space for a Lauson inboard motor

A NEW VENTNOR FLEET

▶ The postwar plans of the Ventnor Boat Works, Atlantic City, N. J., whose reputation for championship craft has earned international fame, introduce a new policy in the history of the company. Engaged in war production for both the Army and Navy, Ventnor has completed all details for conversion of its West Atlantic City plant to peacetime construction, and is working on a new program that marks Ventnor's debut into the dealer field.

In the sailing class, the organization will offer a Moth, a Comet, a two-berth auxiliary and a four-berth auxiliary equipped with two staterooms. The Ventnor 13′ outboard will be a combination runabout and utility. There will also be available 17′, 21′ and 26′ runabouts as well as utility boats of the same dimensions. Further plans call for a 26′ cruiser and a 26′ sport fisherman. The company will build a combination 90 or 135 cubic inch and a 225 cubic inch racing craft.

Yachtsmen who want an honest, able, cruising auxiliary of minimum length, yet incorporating all accommodations necessary for extended cruising for two, in shallow inland waters as well as off-shore, will be particularly interested in the Ventnor "Twosome." She has a 21′ hull that is exceptionally able and fast. Built for speed, as well as cruising comfort, it is planned, at the owner's option, to supply a Lauson 3.7 hp. 2:1 reduction gear water-cooled motor with reverse gear and electric starter for a speed of 6-¾ m.p.h. Marconi-rigged with permanent backstay, all halliards are led to the after end of the dog house for handling from the cockpit, making her an ideal single hander. Deck is canvas covered, cockpit is self-bailing with teak flooring. Cabin sides and trim are mahogany. Considerable emphasis has been placed on the cabin arrangement so as to provide roominess and completeness of cruising accommodations. Windows will be of unshatterable type with two ports forward. The dog house permits greater headroom than is possible in any other type of design. Full sitting height is provided over the bunks and toilet. As a day sailer, the cockpit has ample room for five or six.

Plans for another Ventnor boat, the "Foursome" — a 26-footer with two staterooms and full bedroom — are complete and will be published shortly.

NEW FELLOWSCRAFT PLANNED

▶ A background of a half-century of building some of the West's finest yachts, enhanced by design and production techniques developed during the war, is going into the planning of a line of postwar Fellowscraft power and sailing yachts. Fellows and Stewart was one of the first western firms to develop a line of stock power cruisers and these popular boats will have ultra-modern counterparts going down the ways just as soon as civilian production is resumed. Particularly adapted to use along the California coast, the new Fellowscraft will be available in a number of sizes and styles and will be outfitted as cruising boats or as sport fishermen. Fellows and Stewart are also planning an extensive construction program of one-design auxiliaries similar to their popular Island Clipper and the California "32".

NON-INFLAMMABLE PAINT

▶ A new metallic paint called Blaze-Pruf Silver-Lume which will not burn, blister, flake or check even on white hot metal, is being manufactured by the Wilbur & Williams Company, Park Square Building, Boston. Blaze-Pruf can be applied to metal or to wood and can be used not only on motors but also in motor compartments and on bulkheads. Its use in motor compartments is particularly interesting because of the paint's fire retardent feature. In the can, or on a wall, Blaze-Pruf is non-inflammable.

The paint is manufactured in silver or in white and can be applied to metal surfaces without an undercoat. According to tests made by the company, a single coat has good hiding quality. It comes ready-mixed and can be brushed or sprayed on. Blaze-Pruf is the latest of a long line of protective products engineered for a particular purpose by the Wilbur & Williams Company. Among these are Totrust, the penetrating rust preventive, Dyecrete, the deeply penetrating color hardener for concrete floors, Dampcoat Enamel for enameling wet surfaces and many others familiar to both the marine field and industry.

EXPERIMENTAL PLASTIC-PLYWOOD DINGHY

▶ From the Vidal Research Corporation, Central Airport, Camden, N. J., comes the report of a Vidal-molded combination plywood and plastic dinghy which the company has designed and experimentally built. The sides of the boat are made of Co-Ro-Lite plastic and were taken from quarter sections of an expendable gasoline tank made for naval aircraft. Double flooring was inserted to increase the beam and to provide an air cell for buoyancy. The floor grating and seats are mahogany and the hardware is bronze. Her weight is 55 lbs.

"During the summer," state the builders, "we had ample opportunity to test this boat while in actual service as a tender. She lay in salt water all season with no discernible damage. She can be easily lifted out of the water and due, to her aerodynamic shape, blends into the cabin house of a cruiser or auxiliary when carried there in an inverted position."

A real dink, and weighing but 55 pounds! She is a Vidal-molded combination of plywood and Co-Ro-Lite plastic. Floor grating and seats are of mahogany

TRUSCOTT'S POSTWAR PROGRAM

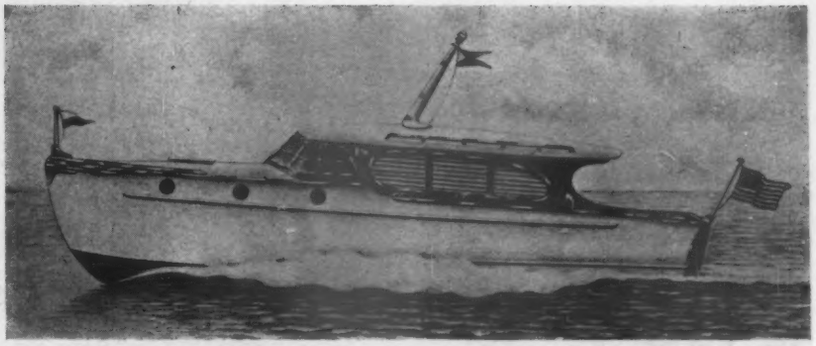
▶ The Truscott Boat and Dock Co., St. Joseph, Mich., like most boat yards, is still 100 per cent in war work. Plans and experimental work for postwar boats receive a "catch-as-catch-can" attention. Basically, the postwar program will include a full line of stock cruisers, approximately 22′, 28′, 32′, 36′ and 42′ o.a., each with a choice of two or three cabin arrangements; all adaptable to either single or twin screw installations. The custom-built boats, also from stock designs, will include a 52′ o.a. motor sailer and cruisers of 52′, 62′ and 72′ o.a. length. The Truscott "H28", designed by Herreshoff, will also be offered as a stock item. Work has progressed on all of these designs and experimental boats have been built of the two smaller sizes.

The Truscott "52" is a ketch-rigged motor sailer 52′ 9″ o.a., 14′ 4″ beam and 6′ 2″ draft. She may be semi-custom built in either metal or wood. Sleeping accommodations are for six to eight persons, with crew's quarters for two. She is controlled under power from the enclosed bridge deck, and sailed under canvas from the after cockpit. She carries 1135 sq. ft. of sail which assures real sailing ability. The 165 hp. diesel engine provides a wide cruising range and 12-knot speed under power.

The Truscott "28" is an outstanding low cost cruiser. She is 28′ long, 9′ beam, with a speed better than 20 m.p.h., depending on motor selection. She will be built in three different arrangements — a sport cruiser, a family model and a fisherman.

The Truscott "32" is the ideal cruiser for the man who wants to skipper and care for his own ship. Large enough for comfort and small enough for a minimum cost of upkeep, she is 32′ o.a., with a beam of 10′ 6″, and provides sleeping accommodations for four, two in the stateroom forward and two in the deckhouse. Engines of optional hp. for speeds better than 20 m.p.h.

The Anchorage's patented 9-foot Dyer Dhow. Large numbers of these rowing-sailing models have been used on PTs, SCs, aircraft rescue and other high speed war craft



Above, one of the extensive line of stock cruisers to be built by Truscott. She is the 32-foot "family model." Below, an experimental model of the 24-footer. Trim and fittings have not been added

The Truscott "42" is designed for yachtsmen who demand luxury cruising at moderate cost. She is 42′ long, has a beam of 11′ 9″ and has sleeping accommodations for seven. Twin engines of optional hp. give speeds up to 25 m.p.h.

DYER DINKS COMING

▶ From The Anchorage, Inc., of Providence, R. I., comes word that the company has applied for permission to return to a moderate amount of production for civilians in order to fill a back log of orders. No dates are being set for the production of the dinghies for which this company is famous, but development work on postwar models of dinghies, dhows and the 26′ Dyer Dhow Senior is now in progress.

Bill Dyer proudly reports that The Anchorage is the only boat yard in Rhode Island to have received the Army-Navy "E" and that their 16′ and 12′ wherry designs have been adopted by the Navy Department "as standard." The patented 9′ Dyer Dhow has been successfully used on PTs, SCs, aircraft rescue and other high speed boats where weight is of importance.

Mr. Dyer has also announced that Harvey J. Flint, the well-known racing skipper, has become associated with his organization to assist in handling the brokerage department, and will maintain an office in Providence at 52 Weybosset Street.

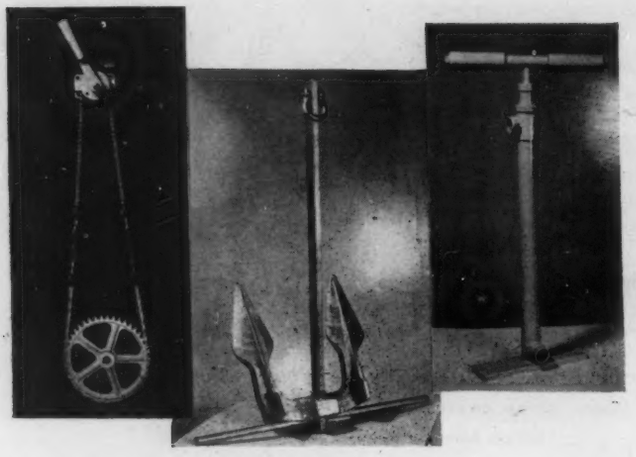
ELCO POSTWAR FLEET

▶ At the war's conclusion Elco will resume building an extensive line of pleasure craft which will inherit some noteworthy features from the Elco PTs. Yet in spite of hundreds of inquiries received from yachtsmen whose keen interest in postwar boats has been aroused by the performance of the PTs, Elco has not yet released preliminary details of any of its forthcoming designs.

There are numerous important by-products of the company's wartime program which will work to the advantage of future Elco owners. New and greatly expanded plant facilities at Bayonne; streamlined production techniques developed to speed the PT output; special materials and chemicals perfected to increase strength and reduce weight; invaluable performance data collected during hundreds of boat trials conducted under every conceivable condition. All these features are sure to contribute much of value and interest to the postwar cruisers which will be built by the company at Bayonne, N. J.

SHERRILL MAGNETIC DIRECTOR COMPASS

▶ The Sherrill Research Corp., Peru, Indiana, is now manufacturing a magnetic director compass that is standard equipment on cars, tanks and other combat vehicles of steel. For postwar use Mr. Sherrill has developed an improved and inexpensive type of compass for use on pleasure boats. Since the manufacture of the product is possible without the use of critical materials (many parts being made of plastic), it is anticipated that production will begin within the next few months.



Wilcox-Crittenden's postwar line of marine hardware includes fittings for every part of practically every type of boat. Left, a successful reverse gear hook-up. Center, the improved "Sea-Claw" anchor. Right, a pump you can really get hold of

WILCOX, CRITTENDEN'S REDESIGNED EQUIPMENT

▶ Every sailor who has struggled and sweated to open a frozen seacock will applaud the new ones included in Wilcox, Crittenden & Co.'s preview of things to come immediately upon the release signal from the WPB. These seacocks are so designed that they can be easily and adequately lubricated after installation, thus eliminating any excuse for frozen plugs. Wilcox, Crittenden claim also to have eliminated the need for contortions by designing a new handle for their seacocks, which has more leverage, fits better, and is removable so that in cramped installations it can be quickly and easily reset at a new angle.

Another important piece of equipment on every boat is an efficient bilge pump. Wilcox, Crittenden describe a plastic barrel bilge pump that sounds like the answer to a sailor's prayer. It has the virtues of light weight and easy action and the more the pump is used, the more burnished the inside becomes. There is no sticking from corrosion and the barrel will hold water for hours. The pump has screw top opening, priming plug, drain cock in the bottom and all-brass poppet, valve bottom assembly.

The manufacturer's preview contains two other interesting items of marine hardware. The first of these is a deck plate key that really works. Wilcox has gone completely to galvanized steel spanners that really fit the holes in the plates, have greater leverage, and are said to be able to open any plate, however jammed. Another improvement is the simplification of hole spacing in the entire line of deck plates so that one key will fit more than one plate. Since keys have a way of getting lost, these new deck plates should be a real boon.

The second type of deck plate is for the gas tank fill and has no separate key. It is made with an integral drop handle and there is a retaining chain (that won't kink) on the cover. The plate is big enough to take a filling nozzle with lots of air space to spare.

As in the past, the company will have available a complete list of marine closet installations in the Sands and Wilcox lines. These are made for gravity, hand pump, and electric operation, and for all types of installations above and below the waterline.

Redesigned running lights which comply with the latest USCG regulations will also be available. These are lightweight, watertight and foolproof. Wilcox, Crittenden & Co., with headquarters in Middletown, Conn., will continue to manufacture, in addition to the new items, all the equipment tried and proved before the war and plans to have a complete selection of fittings for every part of practically every type of boat.

A hand-operated fog horn made by the Faraday Electric Corp. This manufacturer produces a wide variety of marine horns and signals

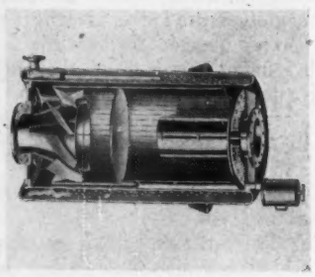
CHAMPION'S STEPPED-UP HORSEPOWER

▶ Reduction of weight and stepped-up horsepower are two of the features of the Champion which have already been developed by factory engineers and have been tested and approved by officials of the company. Extensive experimenting and a vast amount of research work have been done by the Champion Outboard Motor Company, of Minneapolis, Minnesota.

"We are now concentrating 100 per cent on the perfecting of our new improved postwar motor," declares the manufacturer, "and we can promise an outboard motor of greater dependability, smoother running, and more easily operated than any we have ever produced. Precision building and tops in design will contribute much toward what we feel will be the greatest surprise in the outboard motor field when the time comes for presenting the new Champion to the boating public."

MAXIM HEAT RECOVERY SILENCER

▶ One of the most interesting new developments which has proved valuable in wartime marine operation and should gain increased acceptance in the postwar years is the Maxim Heat Recovery Silencer. This provides effective silencing of engine exhaust noise, is 100 per cent spark arresting, and also recovers waste exhaust heat to produce steam or hot water for heating the boat or for auxiliary heating purposes. This in itself means substantial fuel saving, as the source of heat is exhaust heat normally wasted. In addition, where the steam produced is also used to distill sea water into fresh, water tank capacity can be reduced and converted to extra fuel carrying capacity, which means increased cruising range. Maxim Heat Recovery Silencers have, under wartime conditions, proved themselves thoroughly practical in marine use and should have broad application in the yachting picture.



Effective silencing, spark arresting and waste heat recovery is effected by Maxim heat recovery silencers

STERLING SANDING MACHINE

▶ A portable sanding machine developed to meet military needs is now being manufactured for civilian use and should prove useful to anyone who is planning to do a complete refinishing job on his boat. The machine, known as the Sterling "1000," operates on a new principle of orbital motion at the rate of 5000 oscillations a minute. A detachable, flexible sanding pad is one of the features of the Sterling "1000." Work can proceed without interruption because the machine can be loaded with extra pads of the desired coarseness or fineness before the job is started. It is manufactured by the Sterling Tool Products Company, Chicago, Ill.

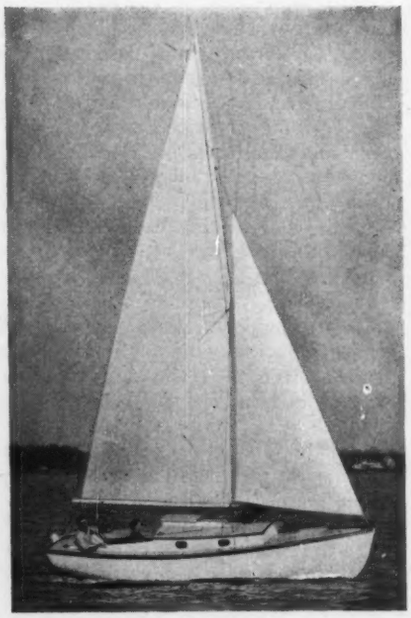
The Sterling "1000" electric sander has a detachable, flexible sanding pad

JEFFERSON-TRAVIS RADIO EQUIPMENT

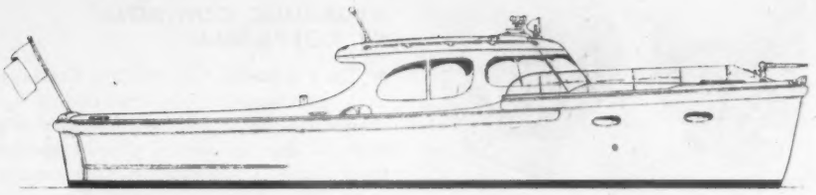
▶ Jefferson-Travis Radio Manufacturing Co., New York, N. Y., has designed and engineered an integrated line of radio communication equipment for installation in postwar pleasure boats of almost any size. These products include a 10 watt radio-telephone with four crystal controlled transmitting and receiving channels, which is excellent when used as an auxiliary with higher powered equipment; a 25 watt radio-telephone, with five crystal controlled transmitting and receiving channels; and a 75 watt radio-telephone, with ten crystal controlled transmitting and receiving channels. All of this equipment is also suitable for point-to-point communication. Jefferson-Travis will also make a sturdy, compact direction finder, and a high gain, top-loaded antenna for installation in boats where efficient antennae installations are not possible.

ABBOTT INTRODUCES THE CALLER

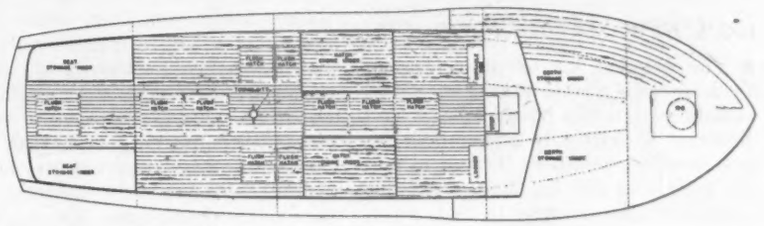
▶ A Rhodes-designed 27-footer named the Caller will be the largest of Donald B. Abbott's 1945 fleet. She will have three berths, enclosed toilet, complete built-in galley, inboard engine (if obtainable), and stooping headroom. Like other Abbott boats, her cockpit will be large. A model Caller, along with other of Abbott's 1945 boats, may be inspected by early spring in his showroom on the Boston Post Road at Mamaroneck, New York. The "baby" of the series of standardized auxiliaries will be the Dater, a smart little two-bunker which proved to be most popular last season. Plans for postwar building now include an auxiliary called the Visitor, which is to be a new Rhodes-designed model of the Over-Niter. In addition to the new Week-Ender, Abbott will have a larger model with accommodations for a paid hand.



Smallest of the Abbott fleet is the "Dater", a Rhodes-designed two-bunker which is but 20 feet over all. Largest of Abbott's 1945 fleet will be the 27-foot "Caller"



Of the four standardized boats of different sizes which will comprise the Owens postwar fleet, three will be cruisers and one an auxiliary. This 42-foot fire and aircraft control boat is typical of recent Owens design and construction



A NEW LINE OF CRUISERS FROM OWENS

▶ Four standardized boats of different sizes will comprise the Owens postwar fleet of cruisers. Of the four new models, three will be power cruisers. The fourth will be a roomy cruising-racing auxiliary. Each of the power cruisers will be built in both enclosed and semi-enclosed models.

The DeLuxe Sedan will be distinguished by a new style of windshield and window design that will increase both visibility and beauty. The forward cabin has sleeping accommodations for two, either as a dinette or as built-in beds, full length hanging lockers and a large galley. The enclosed sedan cabin will have convertible sleeping accommodations for another couple. Modern appointments will furnish this deck cabin, in which steering and operating controls and instruments are located.

The prewar 30′ 6″ cruiser hull will be enlarged slightly, to further add to the unusual roominess of the boat. This slight increase in length will also permit sharper water line entrance, so that the new hull will be even faster with the same power. This hull will also be built in a Sport Fisherman model. She will have complete cruising accommodations for two with the same forward cabin arrangement as the DeLuxe Sedan model.

New types of marine finishes will be used in all Owens models. Noteworthy new features will be the cumulative results of experiments to improve heat and sound insulation throughout; to improve mattress design; and to develop trouble-free electrical circuits and wiring, all accessibly fused.

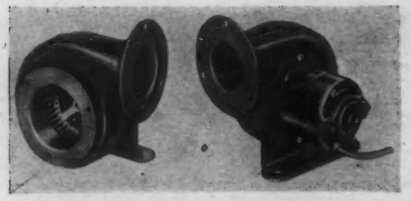
The experiences gained in making the prewar 30′ Sedan so roomy for her length will be noted in the new Commuter, for even though the new Commuter is a shorter boat, she will have practically the same amount of room. The toilet room will be forward under the bow deck. The sedan cabin is located approximately amidships, while there is a good size cockpit aft. The cabin arrangement will be unusual, with convertible berths to sleep four, as well as a galley, and a clothes locker.

The Sportster, built on the same size hull, includes a lavatory in the bow and a windshield and canopy over the forward part of the large open cockpit, and there is room opposite the built-in helmsman's seat for a fold-away berth. Safety features include extra heavy, lead-lined gasoline tanks, with special fuel filling and safety filler caps, neoprene hose connections on fuel line joints, safety switches, and large ventilating ducts for forced draft.

In the 40′ class Owens will offer both a motor yacht and the Game Fisherman. The motor yacht will be a fore and aft cabin, enclosed bridge deck cruiser. This boat will have twin screw power as standard equipment. The design is of the modern round bilge type. Gasoline consumption tests already conducted on this boat prove her to be an economical cruiser. Entrance to the large enclosed bridge is through a sliding door on either port or starboard side. In the deck cabin is a lounge-settee which opens into a double bed. The Game Fisherman has the same forward cabin arrangement, and may have either a semi-sheltered cabin or a shorter enclosed bridge deck.

The lumber with which all Owens hulls are built is given a new type of wood preservative treatment. This preservative application is first applied when the lumber is received and again on edges and ends before it is built in place. A system of ventilating all parts of the hull also has been developed.

A part of the company's postwar manufacturing facilities will be devoted to the standardized manufacture of a new racing-cruising auxiliary (see September YACHTING, page 70).



The Ilg 6S utility blower is made in eight different combinations. It is powered by a 110 volt, 60 cycle, AC motor operating at 3400 r.p.m.

ILG'S NEW MARINE PRODUCTS

▶ The new Ilg No. 6S utility blower, available with a wide variety of special mountings, provides boatbuilders with a unit that is practically custom-built for each installation without the cost of special tools, dies and handling. Eight different arrangements may be had, which include: blower only; blower and stand; blower and inlet flange; blower and discharge flange; blower, inlet and discharge flange; blower, stand and inlet flange; blower, stand and discharge stand; or blower, stand, and both inlet and discharge flanges.

The housing and stand of the No. 6S utility blower are made of die-stamped steel, assuring a durable unit. The zinc die-cast multi-blade wheel is dynamically balanced, one of the reasons for its unusually quiet and highly efficient operation. Wheel and motor are direct-connected, resulting in a compact unit to save space in restricted areas. It is powered by a 110 volt, single phase, 60 cycle, sleeve bearing type AC motor that operates at 3400 r.p.m.

The Ilg Portvente electric portho e ventilator, which is designed with a rugged support fastened securely to the ship's side, fits quickly and snugly into the porthole. In one position, it pulls in outside air, and a convenient handle facilitates reversing of the position of the unit so that the ventilator exhausts stale air. With another quick adjustment of the supporting arm and hinge, the complete fan unit swings back out of the porthole and can be locked easily into any desired position for use as a circulating fan.

These marine products are manufactured by The Ilg Electric Ventilator Co., Chicago, Ill.

An electro-hydraulic clutch control of a type made by the Columbian Bronze Corp. The manufacturers also make hydraulic steering gear and throttle controls and many types of control mechanisms and propellers

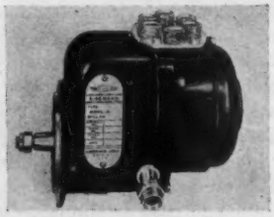
HYDRAULIC CONTROLS BY COLUMBIAN

▶ The Columbian Corporation, Freeport, L. I., announces a complete line of hydraulic marine accessories to be available to the builder as soon as priority restrictions permit. This line will include electro-hydraulic clutch controls, hydraulic steering mechanisms, hydraulic throttle controls and many other devices designed to control mechanisms aboard ship.

Prior to the war, the management of Columbian Bronze Corporation foresaw the necessity for simplified control devices that could be sold at relatively low price and installed economically and easily by the average boat yard. After considerable work the engineering department was convinced that the only type that could answer all these requirements was the hydraulic system. At the outbreak of war they had in production a line of controls that was immediately requisitioned for government service.

Columbian's Model 51 hydraulic throttle control is of the single tube hydraulic type. This model is designed for all types of gasoline or diesel marine engines. Its capacity is sufficient to handle any marine carburetor or similar device requiring the application of a small controlling torque. Its distinctively modern design indicates the great care taken in both engineering and production.

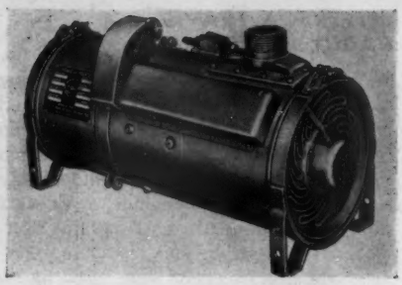
Two new Columbian catalogs, one in the general marine field and the other in the hydraulic field, are in process of preparation at the present time. Their availability for distribution will be announced at a later date. However, installation drawings are available to all yacht owners and builders who may be interested.



This Eisemann magneto is of the radio-shielded type which cuts out interference with ship-to-shore telephones

EISEMANN'S IMPROVED MAGNETOS

▶ The Eisemann Corporation, Brooklyn, N. Y., which has been manufacturing magnetos for more than thirty years, reports that two of its improved models, now being supplied to the armed forces, will be ready for release to yachtsmen at the war's conclusion. One of these models is a radio shielded magneto with suppressed spark features which cuts out ignition interference in ship-to-shore communication. The second is the "LA" magneto, a high precision unit developed for light planes.



A 6, 12 or 24-volt combination electric heater and ventilation unit made by the Herman Nelson Co.

NELSON'S COMPACT HEATER

▶ A combination electric heater and ventilation unit which operates on 6, 12 or 24 volts DC. is manufactured by the Herman Nelson Corp., Moline, Ill. The unit is 15¼ in height, 6⅛" in diameter and has an integrally designed fan and electric motor. The fan can be operated independently to provide ventilation on hot nights. The unit incorporates a new low pressure principle of combustion resulting in a minimum of battery current drain.

JOHNSON LOOKS AHEAD

▶ Johnson "Sea Horse" outboards have been doing an important job in the European and Pacific theaters and the manufacturer has been doing a big job at home in turning them out. When the war is won, Johnson plans to swing into production for civilian use, manufacturing the same types of motors which were discontinued by government order in March, 1942. There will be some modifications, hence the line may be somewhat short at first.

A review of the last peacetime list of Johnson outboards gives a picture of what the yachtsmen can look forward to. The complete line included ten models ranging from 1.5 to 22 hp., and streamlined both above and below water. They were equipped with rubber-rotor pumps which provide adequate cooling at all speeds since such pumps do not depend upon centrifugal force for their operation. The Rubber-Flow shock absorber drive provides unusual protection to the propeller and to the shear pin. Because of the popularity of the Johnson Ready-Pull starter it is to be expected that a high percentage of the motors produced will contain this feature.

Johnson's Model SD has a pressure feed gasoline system, the first outboard to be so equipped. It also has Hi-Vac cooling, which provides adequate cooling at the slowest speed, and alternate firing cylinder cast in a single block of aluminum.

Later on, Johnson plans to bring out new models incorporating many of the lessons learned in precision war production. The company is indefinite as to how long a time will elapse before these models are perfected since engineering has to start practically from scratch.

SOMETHING TO LOOK FORWARD TO...

Every boating enthusiast looks forward to the day when he, his family and friends can once again enjoy the pleasures of boating to the limit. It's certain you'll resume them with renewed zest and a keener appreciation than ever.

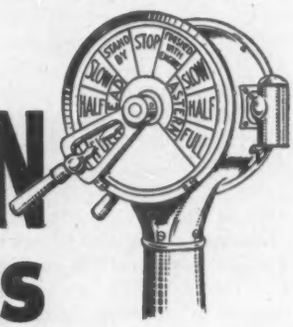
You can apparently look forward to many advances in boats, engines, conveniences and comforts, too. Just what they may be, we don't know.

But we do know that you can look forward to even better performance and greater dependability in Champion Spark Plugs for every marine engine.

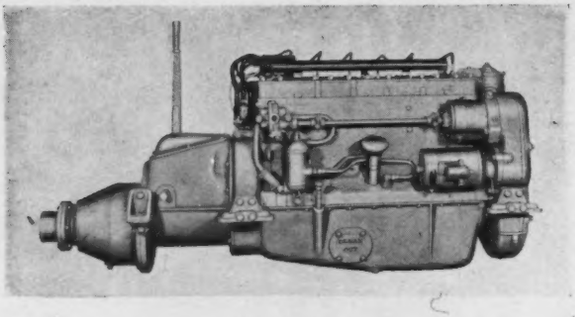
The Champion Spark Plugs on active service with our armed forces now, on water, land and in the air have set new high standards of performance, and compiled unequalled service records, which are a guarantee of their continuing better performance and dependability in your marine engine, now and in the future. Champion Spark Plug Company, Toledo 1, Ohio.

DEPENDABLE

CHAMPION SPARK PLUGS



"FOR EVERY MARINE ENGINE"



The Gray Six-121 gasoline engine with reduction gear is a perennial favorite. Piston displacement is 330 cubic inches. Reduction gear ratios are 2:1, 3:1, and 5:1

GRAY'S POSTWAR PLANS

▶ Gray Marine Motor Company continues at high production on gasoline and diesel engines. While accepting precedence orders from civilians for all cataloged models and sizes according to regulations, Gray is currently making prompt shipments of engines for essential civilian use on regular priorities, especially on models having wartime applications.

From their complete line of 23 gasoline engines, five representative sizes are now available, including the Light Four (69 cu. in. piston displacement), Four-22 (112 cu. in.), Six-77 (a 226 cu. in. model which replaces the former Six-71), Six-91 (244 cu. in.) and Six-121 (330 cu. in.). None of the Phantom Series high speed engines is as yet in production. All standard sizes of Graymarine Diesels are available; one-, two-, three-, four- and six-cylinder models, 25 to 165 hp. These are the "Series 71" General Motors 2-cycle diesel engines, adapted and equipped for marine propulsion. As in the past, Gray crankcases and crankshafts will continue to be individually developed specially for marine uses. Interesting new developments are in process utilizing standard design and promising unique flexibility in meeting the postwar needs.

DAIR LONG EXPRESS CRUISER

▶ From the board of Dair Long & Associates come the plans of a 63′ express cruiser, the first models of which are to be built by a well-known West Coast yard. Beam is 15′ 4″ and draft 3′ 9″, she will be powered by twin Hall-Scott Defenders for a speed in excess of 40 miles an hour, and will be fitted with fishing chairs, a fish well and a removable plastic canopy for the flying bridge. The galley will have mechanical refrigeration and the main cabin will be air conditioned. It is expected that delivery on the first boats will be made as soon as pleasure boat construction is permitted.

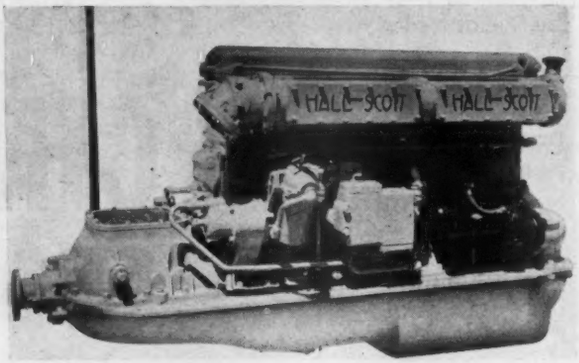
Other postwar plans of Dair Long & Associates include the designing of several different sizes and types of standardized power cruisers for various shipyards, as well as custom designs for individual yachtsmen. They also expect to turn out a number of classes of auxiliary cruising and racing sailing craft and are now engaged in preparing the designs of cruisers 39′ 6″, 35′, 32′ and 27′ o. a., which will be powered with both gasoline and diesel engines. "All are of wood construction," says Mr. Long, "with no particular emphasis on the much discussed 'new' materials. We are continuing our research in the development of more seaworthy high speed hull forms."

PALMER SCOTT'S "CHARTER FLEET"

▶ Palmer Scott & Co., New Bedford, Mass., will initiate the first of their "charter fleets" in the late spring of 1945. "It will consist of a fleet of 31′ auxiliary cutters," states Mr. Scott, "which have been designed by Sam Crocker, of Boston. This fleet, which will consist of sister ships, will have its headquarters in New Bedford. With our municipal airport we are but a half hour's flying time from Boston and one and one-half hours from New York.

"These boats will not be chartered for less than a week. We intend to have our clients met at the airport or station by a yard man. If the client desires, we will even have groceries put aboard, and when the boat returns from a charter we are going to operate a specialized service which includes not only the servicing of the craft below decks, but also the checking of rigging, sails and so on. We have found that, as a rule, when a boat goes out on the first charter everything aboard is in A-1 shape; by the third or fourth charter there is usually a deficiency of one kind or another. We hope to correct this situation. We intend to protect all brokers. We will also have a sale price set for each boat, and if someone wants to buy her, a broker will be in a position to do something about it."

Palmer Scott will also continue to produce the 13′ 6″ Rhodes-designed "Wood Pussy."



The Hall-Scott "Invader," first introduced in 1931, is known for its dependable performance. It is built in three models: medium duty direct drive, high speed direct drive, and high speed reduction gear

LIGHT WEIGHT SEXTANT

▶ Every navigator will be interested in the new Link aviation-marine sextant which includes both spirit level bubble and natural horizon attachment. The sextant is made of aluminum, weighs only 2½ pounds and is perfectly balanced. Other features are the light bulb fixed in a lucite rod in the movable arm to illuminate the scale at night, and two sunshades to reduce the glare of the sun during daytime operation. The sextant, made by Link Aviation Devices, Inc., Binghampton, N. Y., can be used for both direct and indirect sighting. For direct sighting the object itself is seen in the index glass.

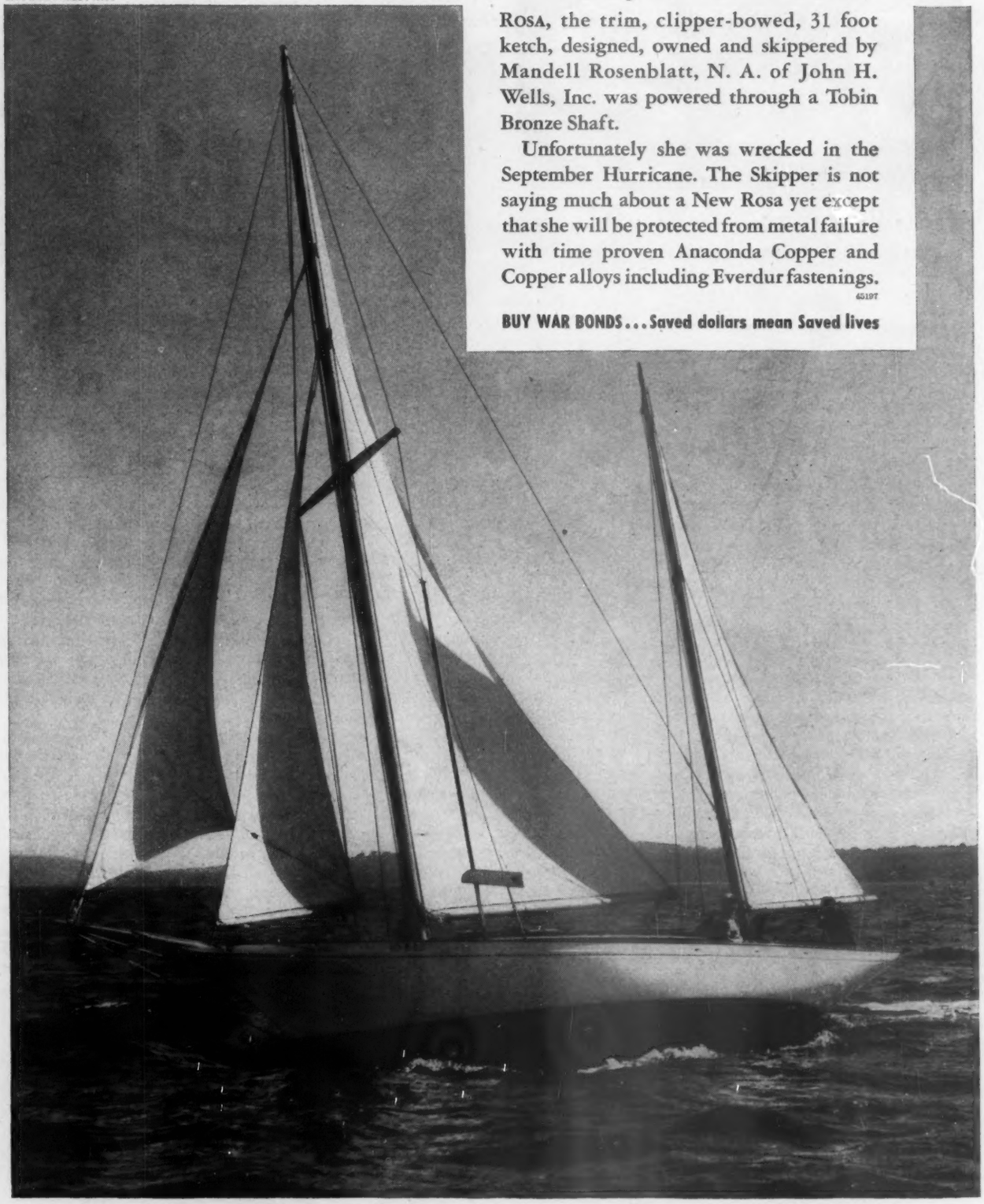
The Link aviation-marine sextant, with spirit level and natural horizon attachment, weighs but 2½ lbs.

CARBON DIOXIDE FIRE PROTECTION

▶ The wide wartime use of carbon dioxide extinguishing equipment has resulted in improvements in this form of protection that will be valuable to the yachtsman after the war. The recent development of the C-O-Two's "Squeez-Grip" valve, which has been adopted as standard for hand extinguishers of the carbon dioxide type in all Navy vessels, has increased the ease of handling and the extinguishing efficiency of the extinguisher. This valve for the release of the gas is now available for replacement of the old hand-wheel type of valve as well as in new extinguishers. Another C-O-Two wartime development is a pressure-seat type of valve for carbon dioxide system cylinders. The valve will withstand severe shocks and will not open or discharge prematurely under the severest conditions. This new and improved shock-proof valve made by the C-O-Two Fire Equipment Co. is also used by the Navy and is now available to boat owners.

HAIL . . . *not farewell!*

M. ROSENFELD, N.Y.



ROSA, the trim, clipper-bowed, 31 foot ketch, designed, owned and skippered by Mandell Rosenblatt, N. A. of John H. Wells, Inc. was powered through a Tobin Bronze Shaft.

Unfortunately she was wrecked in the September Hurricane. The Skipper is not saying much about a New Rosa yet except that she will be protected from metal failure with time proven Anaconda Copper and Copper alloys including Everdur fastenings.

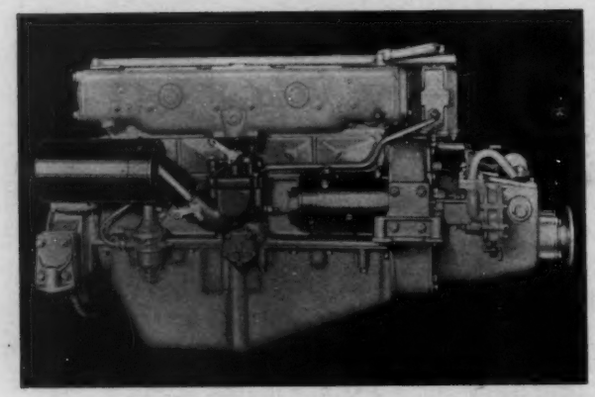
45197

BUY WAR BONDS . . . Saved dollars mean Saved lives

ANACONDA *Anaconda Copper & Copper Alloys*

THE AMERICAN BRASS COMPANY—General Offices: Waterbury 88, Connecticut

Subsidiary of Anaconda Copper Mining Company • In Canada: ANACONDA AMERICAN BRASS LTD., *New Toronto, Ont.*



The Chrysler six-cylinder Crown gasoline engine is available with any one of five different reduction gear ratios. Powerful and highly flexible, it has long been a popular installation for both cruisers and auxiliaries

DIESELS BY LORIMER

▶ In many far off corners of the world, diesel generator sets manufactured by Lorimer Diesel Engine Co., Oakland, Cal., are now working overtime. In addition to generator sets, Lorimer makes a heavy duty engine which is being used in many Pacific and Gulf Coast fishing boats. As a result of its war work, this company has added a line of 7½" bore engines which raises its largest engine size to 200 bhp. With this motor, the scope of Lorimer's activities has been increased to the production of engines for larger boats. One of the interesting new developments by Lorimer is the application of the well-known "Twin Disc" combined reverse and reduction gear to their 150 hp., 700 r.p.m. engines.

NEW FEATURES OF CHRYSLER MOTORS

▶ Postwar purchasers of Chrysler marine engines will benefit from the manufacturer's wartime experience which has resulted in improvements in design and the addition of many new features. Chrysler has, in effect, developed a new engine for long life, stamina, performance and economy of operation and maintenance. The new features, plus a fundamentally sound basic design, are enabling the engines to meet all wartime requirements and assure increased satisfaction for civilian use after the war.

The following new features are now standard on some or all models and optional on others:

Corrosion proof electrical equipment has been designed to assure the best in electrical performance under all types of operation. This includes water-proofing the generator and making all exposed parts corrosion proof.

Due to the need for protecting the carburetor against dirt, a metal-edge gasoline fuel filter has been designed.

Rubber water pump gears give outstanding performance and longer pump life. The ability of rubber to withstand abrasion and corrosion and pass hard particles without damage to the gears makes this material superior to metal.

The triple-ball-bearing reverse gear was designed to meet the demand for longer life and smoother operation. It can be operated under extremely heavy loads for a long period of time. The lined malleable reverse gear band was designed to give more gripping power to the drum, which insures a more positive reverse.

The Gerotor lubricating oil pump increases the amount of circulating oil at low speeds. At higher speeds, where an excess of oil is circulated, the amount not used for the engine and reverse gear is by-passed back to the pan; while the full-flow oil filter, with many times the capacity of the former device, filters all the oil going to the engine's vital parts and safeguards the mechanism against damage from fine abrasives.

BENDIX CONTROL SYSTEMS

▶ Systems of control for all types of yachts will be made available after the war by Bendix-Marine, a division of Bendix Aviation Corporation. These systems, designed to make the handling of all vessels easier and safer, will be adaptable to existing boats as well as to new construction.

Several entirely new devices, unknown before the war — underwater logs, remote reading compasses and new developments for remote controls and hydraulic equipment — offer great possibilities for adaptation to pleasure craft. The Bendix-Marine radio direction finder is already being used aboard commercial vessels in service on the Great Lakes, and it is not too far-fetched to believe that a simplified model of the aircraft radio compass will be developed to provide pleasure boats with the added safety factor that such a device provides.

VALSPAR'S POSTWAR PLANS

▶ After several years of testing, Valspar's "Malabar," a popular yacht bottom finish, has been approved by the U. S. Navy Bureau of Ships as meeting its specification 52-P-20. This particular specification calls for an anti-fouling paint for high speed wood vessels. "As far as we've been able to learn," states the manufacturer, "only one other manufacturer has had a material approved by the Navy on this specification. And, after the war 'Malabar' will again be available to yacht owners."

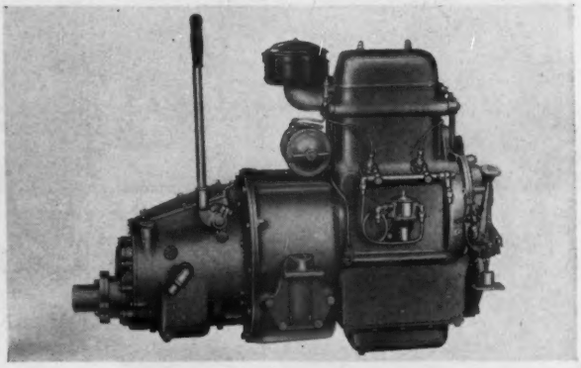
As restrictions on raw materials are relaxed, Valspar will offer to yachtsmen a vastly improved line of marine finishes. The manufacturer states that they will be quicker drying, more resistant to sun, wind, saltwater and rain. Among the various new Valspar items important to yacht owners will be a "Rot Inhibitor," which the manufacturer believes will go a long way to preserve hulls below as well as above the water line. Valspar will also market a special material for new canvas decks, a material which will take the "bugs" out of re-canvassing.

NEW TYPES OF GLASS

▶ There seems little question but that curved glass, now helping to decrease wind resistance in airplanes, will be used in streamlining the postwar yacht. At the war's conclusion this type glass, as well as many other types now being installed in naval vessels, will be available, and naval architects are now working on plans in which it will be incorporated. Among the new types is Tuf-Flex, which bends, but does not break easily even under terrific stress.

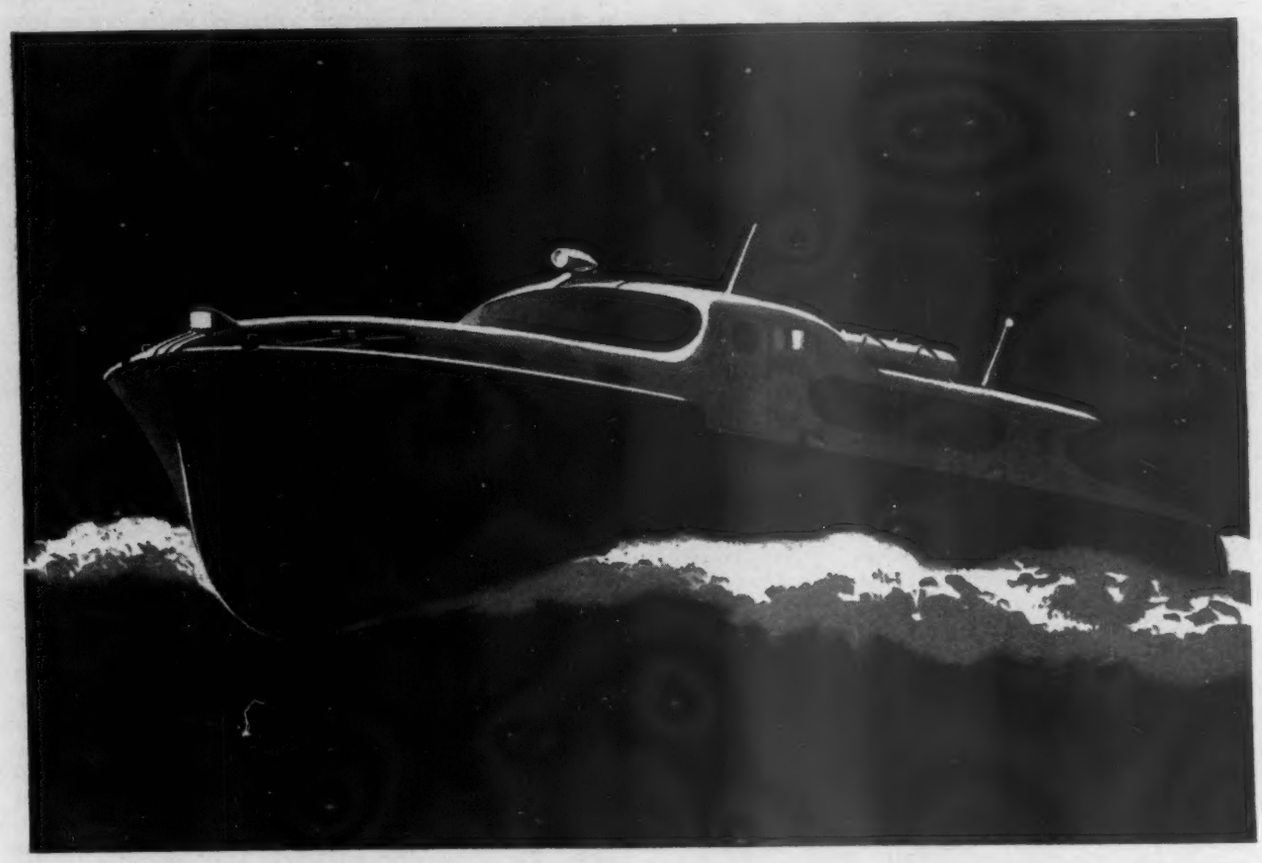
Another type of glass known as Thermopane will be welcomed by yachtsmen who like to go into commission early, and to haul only when the snow flies. Thermopane is made of two or more panes of glass with dehydrated air spaces between and sealed around the edges by a metal-to-glass bond. Besides cutting the loss of heat through cabin windows by as much as 50 per cent, Thermopane does not fog over.

Increased use of Fiberglas for insulation purposes in bulkheads and on pipes is also forecast by the Libbey-Owens-Ford Glass Company, manufacturers of these products.



An excellent example of a small and efficient diesel is the Kermath "2-127." It is suitable for a wide variety of installations

Sure, you'll have her . . . and she'll have a



NEW CHRYSLER MARINE ENGINE

Yachtsmen with yearnings, listen!

There'll come a day when the war-proved worth of the new Chrysler Marine Engines is used in peacetime for pleasure. They are the engines you've dreamed about for that boat you're going to have.

Don't wait till the end of the war, though, to find out about them. Their performance in front-line combat action has taught us many ways to make them better Marine Engines for *YOU*. All 4 types offer you unique advantages.

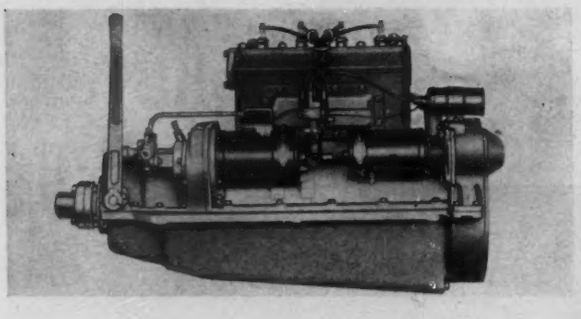
Consult your nearest Chrysler Marine Engine Dealer now. He will be glad to discuss your post-war hopes —and to show you how the New Chrysler Marine Engines fit the schemes of all your dreams.

If you plan to re-power your present boat, he will have some helpful suggestions for you. Under certain conditions replacement engines are now available. See him today.

THE NEW CHRYSLER MARINE ENGINES

ACE
CROWN
ROYAL
DIESEL
80 to 141
Maximum
Brake
Horsepower

ON ALL the United Nations' fighting fronts today the Chrysler originated "Sea Mule" is pushing war material ship-to-shore. This fighting craft is built around the sturdy 8-cylinder Chrysler Royal Marine Engine. It takes the place of a tug . . . is very cheap to build, more maneuverable and virtually unsinkable.



The Universal model BN Utility Four, 25 hp., electric starter model. The manufacturers plan to offer all of their models which were so popular before the war, both "improved and better than ever"

TOMORROW'S UNIVERSALS

▶ With nearly 50 years of experience in designing and manufacturing 100 per cent marine motors plus the experience gained in producing large numbers of motors for war purposes, the Universal Motor Co. believes it is in a position to offer tomorrow's yachtsman even finer marine motors for postwar use. While the full scope of Universal's postwar program cannot be told at this time, it can be said that all the models so popular before the war will again be offered, improved and better than ever. These include the following series: the single cylinder Fisherman; the 12 hp. Blue Jacket Twin; the 25 hp. Super Four; the 90 hp. Cruiser Six; the 125 hp. Cruiser Eight; the 110 hp. Sea Lion Six; and the 141 hp. Sea Lion Eight.

SEA-MITE MARINE ENGINE

▶ Prior to the war the Arnolt Motor Co. of Warsaw, Ind., manufactured four cylinder, four cycle, 20 hp. inboard marine engines. Their "Sea-Mite" engine is a sturdy but light inboard engine which has a big reserve of pulling power. It is easily adapted to runabouts, auxiliaries and power boats of all kinds and the manufacturer is anticipating a large demand for it following the end of the present conflict.

Arnolt also manufactures a remote control marine spotlight, "Ivalite." This spotlight can be easily mounted on almost any type of boat and at almost any distance from the dashboard. It is operated by one small knob located on the dashboard and can be rotated and tilted to any angle required. It throws a powerful beam one-half mile long.

ROTARY HAND PUMP FOR HIGH PRESSURES

▶ An all-bronze rotary hand pump that develops a pressure of 125 pounds per square inch and has a capacity of 1.5 GPM has recently been designed by the Blackmer Pump Company, Grand Rapids, Mich. The unit, known as a "dead ship starting pump," is being furnished to the U. S. Maritime Commission. It is also used for other high-pressure hand pump applications aboard ships of every type, such as handling certain types of oils and fuels.

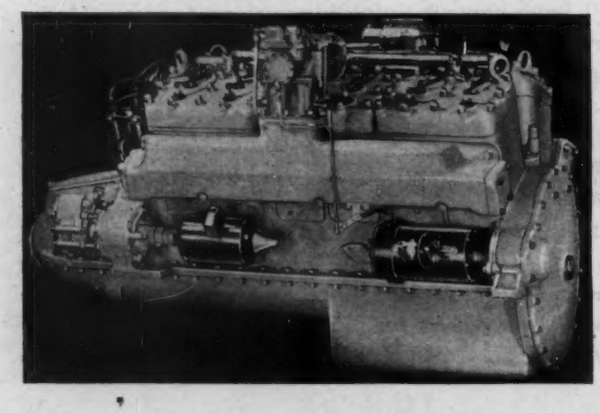
This pump is now a standard unit in the Blackmer line of rotary hand pumps.

SCRIPPS WILL BE READY

▶ Scripps Motor Company will have virtually no reconversion problem when the Government gives the "go signal" on civilian production, as its war-time production has been substantially on standard models. Improved facilities and production methods evolved in the war effort will be retained and incorporated in a complete range of models to cover all requirements within the 25 to 600 hp. field, in motors of the 4, 6, V-8 and V-12 cylinder types.

While many innovations have been developed during the past few years, Scripps has stressed a policy of perfecting the conventional in such a manner as to provide the utmost in efficient dependability.

Peacetime distribution and service facilities are being organized on a basis which will assure every boatman ready access to Scripps products and experience acquired during the past 38 years of manufacturing marine engines.



The Scripps V-12, Model 302, 316 hp., 2600 r.p.m. Piston displacement is 894 cubic inches. This engine will be available in true symmetrical opposite rotation and construction for twin motor installation

SUPER-HARBORITE

▶ Super-Harborite is a material suitable for a wide variety of marine uses. Manufactured by the Harbor Plywood Corp., Hoquiam, Wash., it is waterproof and boilproof, and the smooth grainless surface will not check under long weather exposure. In this respect, it overcomes the principal objection made in the past to fir plywood. Super-Harborite standard panels are 41′ x 8′, but any width or length panel may be produced at the factory by joining the standard panels with a scarf joint in the same manner as super-Harbord marine plywood is made into giant panels.

Because it has been such a critical war item, particularly for aircraft parts and bomb cases, very little of it has as yet been used in boats. A fishing boat is now being constructed of panels 4′ x 20′. Super-Harborite is being used for all-over construction of the hull, that is, bottom, sides and transom, and for the deck and doghouse.

COPEROYD BOTTOM COATING

▶ No changes have been made in Copperoyd, the bottom coating made of micro fine metallic copper chemically combined with a special liquid carrier. The antifouling qualities of this enamel do not depend on toxic agents but on the natural resistance of dense, hard, polished copper surfaces to penetration by organic growth. The enamel can be either sprayed or brushed on and best results, the Metallic Coatings Corporation of New York reports, are obtained by applying Copperoyd to bare wood. According to the manufacturer's directions, only two coats of the enamel should be applied and each should be rubbed down with No. 0 or 00 sandpaper to force the minute copper particles together. A special thinner is supplied with the enamel which is to be thinned down by 10–20 per cent.

The effectiveness of Copperoyd has been proven by its use on PTs operating in tropical waters.

CONSOLIDATED'S PLANS

▶ The post-war program of the Consolidated Shipbuilding Corporation, Morris Heights, N. Y. C., includes plans for resuming construction of their stock 39′ twin motor cruisers and also for the construction of custom-built boats, ranging from 45′ to 75′ and larger. Speedway marine gasoline and diesel engines will also be built, and storage and repair service for both commercial and pleasure craft will be maintained.

CENTURY BOAT COMPANY

▶ Century Boat Company, Manistee, Mich., which has earned the Army-Navy "E" award for its war production, has been working on its postwar plans and reports that rapid progress is being made. The company is holding its fire on the new models until definite specifications, prices and delivery dates can be named.

"You learn a lot about outboards ... in 35 years"

Canny old-timers know it's a fact. Owning motors, being shipmates with them, keenly comparing all types and makes . . . a fellow sure learns a lot about outboards in 35 years!

It's equally true of a manufacturer — with knowledge multiplied by engineering, building and testing hundreds of thousands of motors through this span of years. The result is *know-how* . . . a matchless "all-star feature" that reflects in every phase of operation . . . constantly rewarding the owner with extra dividends of fine performance . . . without a nickel of added cost!

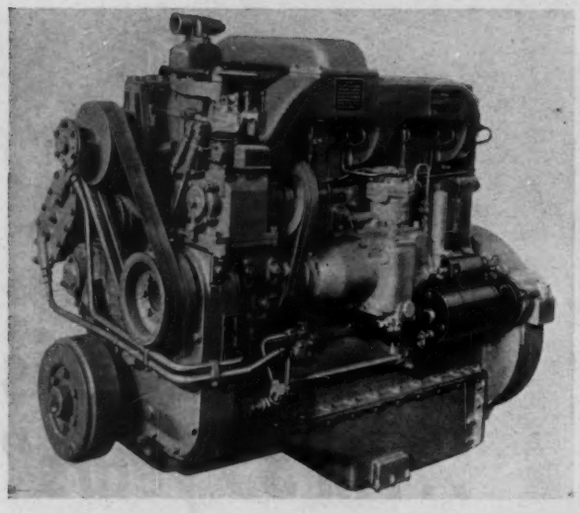
The great Storm Boat Motors that serve on every fighting front are the product of 35 years of Evinrude *know-how*. When peacetime motors can again be built, this same *know-how* will be a priceless part of every motor that carries the Evinrude name.

EVINRUDE MOTORS, ***Milwaukee 9, Wis.***

EVINRUDE

OUTBOARD MOTORS

EVERY DOLLAR YOU INVEST HELPS SPEED VICTORY...BUY MORE BONDS



The Cummins Engine Co. has announced Series NH-600 and NHS-600 diesels as being of higher speed and higher horsepower than previous models. It is the manufacturer's hope that quantity production may be attained at an early date

NEW HIGH SPEED CUMMINS DIESELS

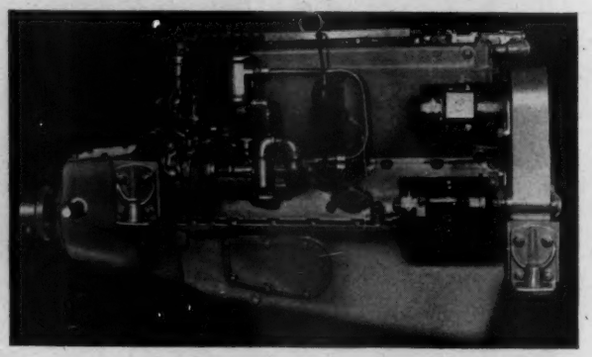
▶ Cummins Engine Company, Inc., of Columbus, Indiana, announces the development of a new series of engines which continues the builder's trend of "more power per pound through high speed diesels."

Series NH-600 and NHS-600 are, in reality, merely higher speed and higher horsepower versions of the familiar Model H and its supercharged counterpart, the Model HS. The increased output of these newly developed six-cylinder engines is obtained by three major innovations: (1), by increasing the maximum operating speed from 1800 rpm. (Models H and HS) to 2100 rpm. (Series NH and NHS). (2), by increasing bore and stroke from 4⅞" x 6" (Models H and HS) to 5⅛" x 6" (Series NH and NHS), which increases piston displacement from 672 to 743 cubic inches. (3), dual intake valves are employed to provide the increased air supply needed to assure efficient combustion of the additional fuel which the engine requires in order to produce increased horsepower. Dual exhaust valves permit the rapid exhausting of gases from the firing chamber.

Quantity production of Series NH and NHS Cummins Diesels is anticipated by the middle of 1945, although those plans are subject to whatever changes may be decreed by developments in the war. The manufacture of all existing models will be continued just as soon as conditions permit, probably in the third quarter of 1945 if present schedules can be maintained.

REPORTS ON MARINE LUMBER SUPPLY

▶ Good news for owners who are thinking of altering their present boats or of building new ones comes from Don B. Wallace & Co., specialists in marine lumber, whose headquarters are in Detroit, Michigan. This company, which supplies builders from coast to coast with genuine Honduras mahogany, Sitka spruce and marine type fir plywood, reports that the moment war demands are satisfied it will be ready to supply lumber in good volume for civilian purposes. Don B. Wallace says that there will be no particular problem of changeover or reconversion inasmuch as the product required for war use is identical with that desired for civilian boats.



Chris-Craft's Model M, which develops 130 hp. at about 3000 r.p.m. The cubic inch displacement is 320.4. It is also made in opposite rotation for twin screw installations

A GEARLESS PUMP BY JABSCO

▶ There is only one moving part in the Jabsco pump, a tough, oil resistant synthetic rubber impeller which creates a near perfect vacuum and thus provides instant self-priming. Hence this pump, designed by this company for bilge and engine cooling, performs these important jobs easily and efficiently.

All Jabsco pumps are self-lubricated by water and since they have no gears to wear, jam, or clog, they can handle sand, chips, and other foreign matter far better than a pump with metal-to-metal action. Working parts cannot stick as there is no corrosion during operation or when idle. Jabsco pumps are reversible and therefore can be mounted at any angle and operated in either direction without in any way affecting their efficiency. These pumps have been tested under tough conditions and reports indicate that upkeep is negligible. The synthetic rubber impeller has been found to outlast metal gears or rotors and, when it does wear out, it can be replaced by a few minutes' work. The Jabsco Pump Co. is located in Beverly Hills, Cal.

UNDERWATER PROTECTION

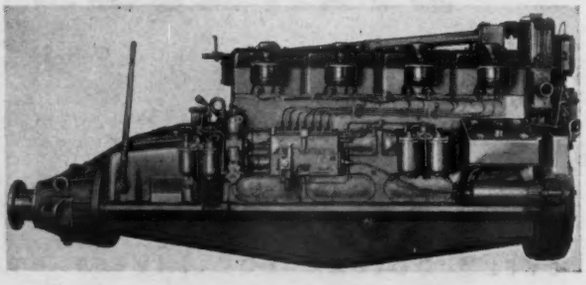
▶ A new method of increasing the effectiveness of bottom paints has been suggested by research conducted by the U. S. Fishery Biological Laboratory, at Beaufort, N. C., at the request of Cuprinol, Inc. For the test, half of each panel used in the experiment was given a priming coat of Cuprinol and then a coat of one of various types of bottom paint was applied. The panels were then submerged in waters where untreated wood had been destroyed by shipworms, Toredo, and the crustacean Limnoria in one season.

When taken out of the water seven months later, the Laboratory reported the condition of the panels clearly indicated "(1) that Cuprinol is an excellent preservative of wooden boat bottoms, (2) that it greatly increases the value of regular copper paints, and (3) that it should be applied to wooden hulls for primary protection in case the bottom paint is rubbed off."

According to this detailed report, boat owners will find Cuprinol an excellent coat for wooden boat bottoms under standard bottom paints.

Copies of the report may be obtained free of charge by writing Cuprinol, Inc., 8 Spring Lane, Boston 9, Mass.

(Continued on page 168)

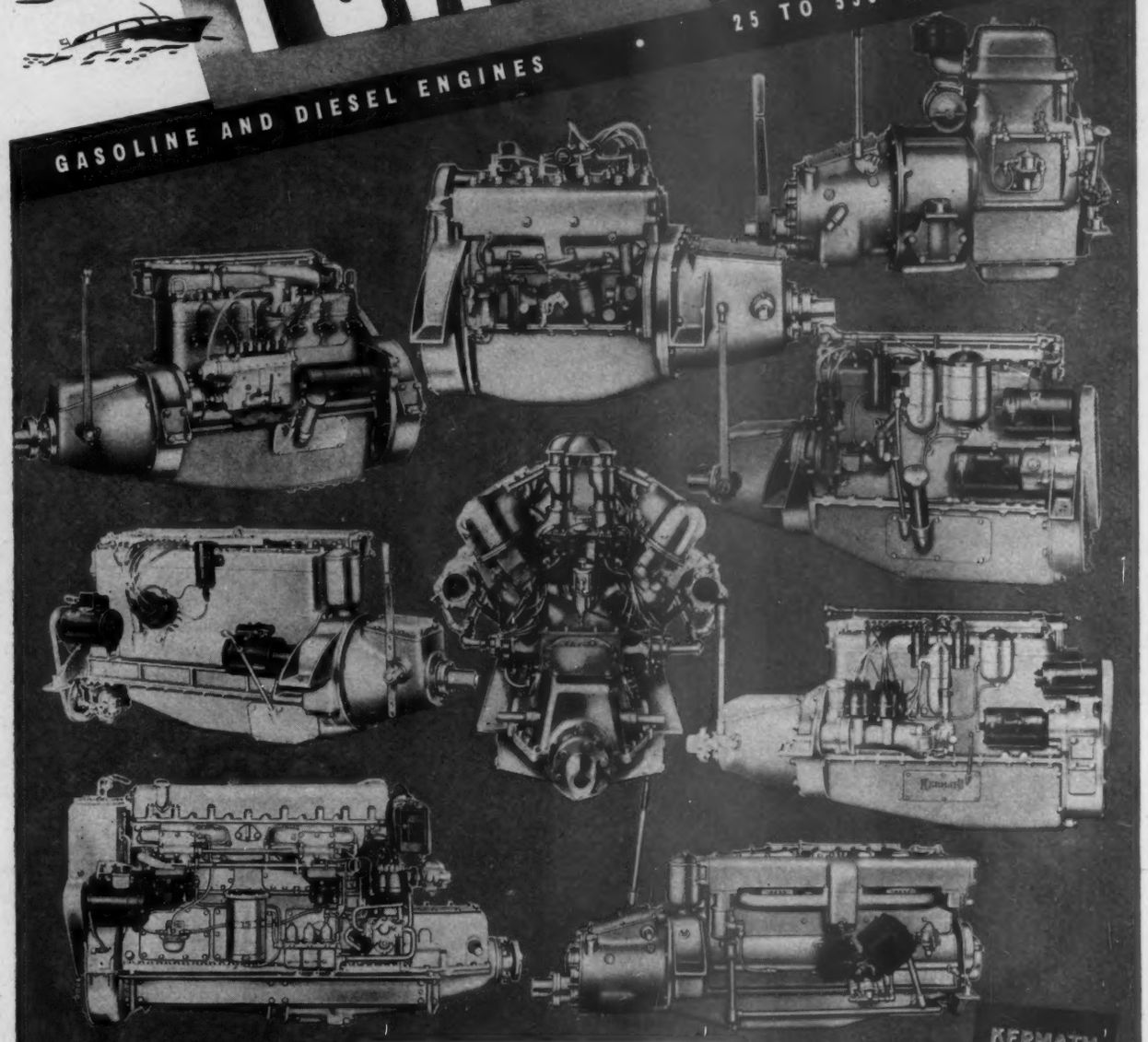


Superior's eight-cylinder Model MRDB. It develops 152 hp. at 1200 r.p.m. for continuous duty, and has up to 230 hp. available for emergency use

POWER

FOR YOUR BOAT COME V-DAY

GASOLINE AND DIESEL ENGINES • 25 TO 550 HORSEPOWER



• As a reminder that marine engines again will be available to meet your power needs, we invite attention to the Kermath marine engine catalog listing the most complete series of gasoline and Diesel engines—from small 4 cylinder 25 horsepower to giant 550 horsepower V-12 engines. Write for it today; it will be mailed on request.

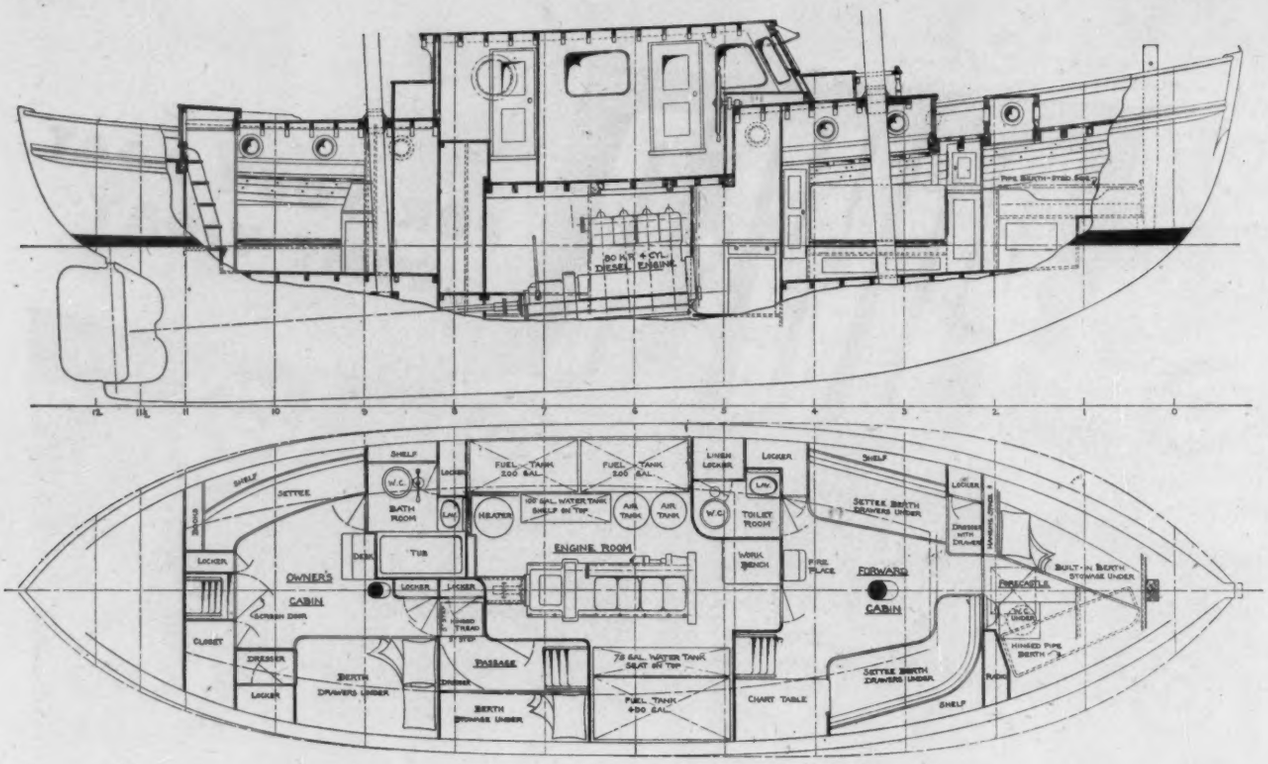
KERMATH MFG. COMPANY
5893 Commonwealth Avenue
Detroit 8, Michigan

ARMY E NAVY

THOSE WHO KNOW MARINE ENGINES BEST... APPRECIATE KERMATH MOST

KERMATH Marine Engines

KERMATH
A Kermath Always Runs



AN ABLE DIESEL MOTOR-SAILER BY ALDEN

THE PLANS herewith are from the board of John G. Alden, of Boston. They show a plainly finished motor-sailer for a well-known Eastern yachtsman (who has owned two large schooners from the board of this designer). Construction will soon be started in Maine at the same yard at which the owner's two previous yachts were built. The model of the new boat is practically a duplicate of that of a banks trawler except that the afterbody is a little longer and finer, and no attempt has been made to lighten the construction or reduce the displacement.

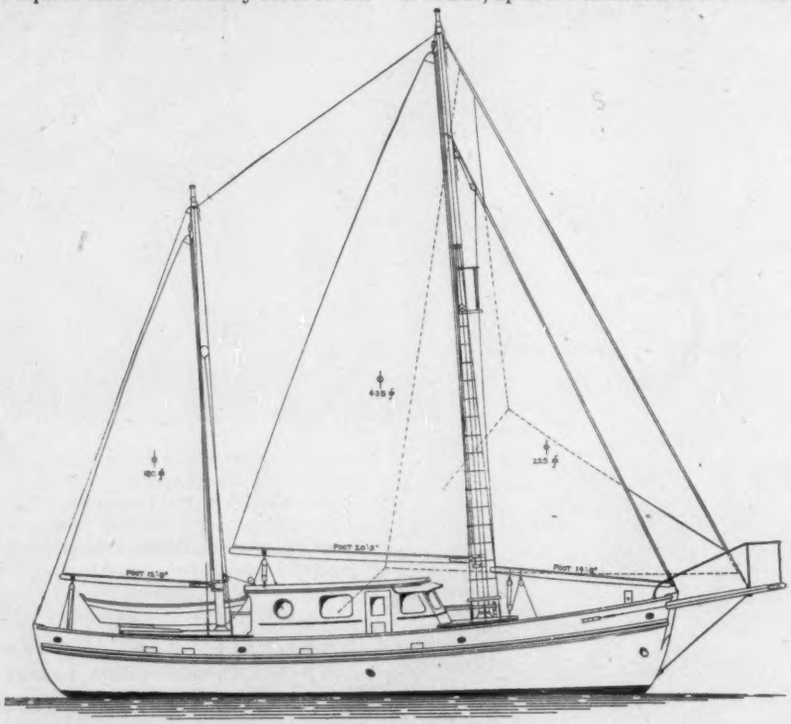
The principal dimensions of the new boat are as follows: length over all, 54′ 6″; length on the water line, 48′ 5″; beam, 14′ 6″; draft, 6′ 10″. Construction is extremely heavy, the planking, for example, being 1¾″ thick. Frames are double, sawn, and are sided 2½″ and molded 5″. Other scantlings are in proportion.

Since weight is considered rather advantageous for this boat, the power plant selected is a 4-cylinder heavy duty slow speed Atlas diesel which develops 80 horse power and weighs about 7000 pounds. The engine room, which is amidships, is exceedingly spacious and has nearly full headroom under the deck between the beams. The fuel capacity is 800 gallons, giving a cruising radius under power of about 1500 miles at a speed of approximately 10 miles per hour. The water tank capacity is some 400 gallons.

Accommodations are unusual, with the main saloon and galley on deck and all sleeping quarters below. Forward is a two-berth forecastle with full headroom. Next aft is the forward cabin, with two settee berths and an adjoining toilet room. Aft is the roomy cabin for the owner, with a wide double berth and a settee. Ample lockers are provided, desk, bureau, etc. Alongside of the passageway leading to the deckhouse is a single berth.

The sail area in the three lowers is 841 square feet. The forestay leads to the stemhead but a combination bowsprit and swordfishing pulpit allows a jib or a good-sized genoa to be carried.

The designer states that the boat will be able to go to sea and stay there in safety in almost any weather. She will be used as a home by her owner twelve months of the year. It is hoped that it will be possible to obtain delivery next summer depending, of course, upon the termination of the war.



The plans reproduced in this section are the property of the designers under whose name they appear. For further information concerning any design address the naval architect in question.

The "38" Raised Deck Sedan

Beauty IS MORE THAN "PAINT DEEP"

★ Real beauty is oftentimes hidden in a Matthews. Things like the rugged beauty of the husky white oak keel. Or the beauty of the curving steam-bent oak frames. Or the beautiful cabinet work throughout the cabin and deckhouse—the beautiful heavy brass fittings and hardware gleaming with a chrome finish.

The experienced yachtsman—the man who has had one or more cruisers—looks deeper than the finish. And in a Matthews he finds beautiful construction and craftsmanship that bespeak utmost quality and value. Details of construction not found in any other cruiser are carried out in every Matthews. That has been true for 55 years.

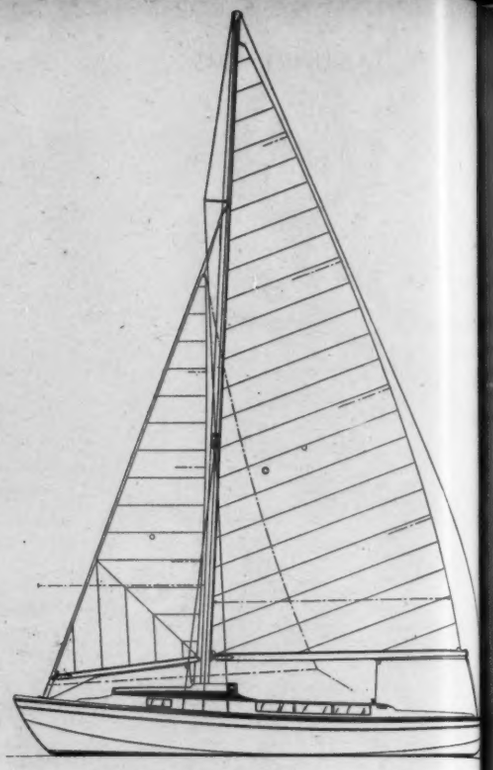
When our war job is finished we'll be glad to send you full details on the new Matthews from 35 to 60 feet. Write us today and we'll add your name to our mailing list.

BUY WAR BONDS AND KEEP 'EM!

THE MATTHEWS CO.
PORT CLINTON 2, OHIO

"Wherever you cruise . . . you'll find a Matthews"

THE DYER DHOW SENIOR, AN UNUSUAL STOCK BOAT



IN TURNING out the design of this interesting boat, her designer, William J. H. Dyer, of The Anchorage, Warren, R. I., says that he had certain definite objectives in mind. They may be summed up as follows: ease of building by economical, production line methods so that the price may be kept low; comfort and safety both as a day sailer and as a cruising boat; accommodations for six to eight persons for afternoon sailing and two or three for cruising; adequate ventilation and full "headroom" in the sleeping quarters; a hull form that combines dryness in a sea with a good turn of speed; moderately shoal draft and light displacement so that the boat may be easily transported by trailer to otherwise inaccessible cruising grounds; a well balanced, all inboard rig with all sheets led to the helmsman, a permanent backstay and the mast stepped on the cabin top. This not only increases the usable space below decks but, if properly designed, distributes the hull stresses. Also desired were optional choice of light sails; enough power to push her along at a good clip, either from a permanently installed inboard motor or an outboard motor operating through a well, as shown in the plans; a hull that will be easy to maintain, that will be watertight and that can be easily repaired in case of accident; a watertight cockpit for safety and convenience; enough speed so that the boats would make a sporty one-design class.

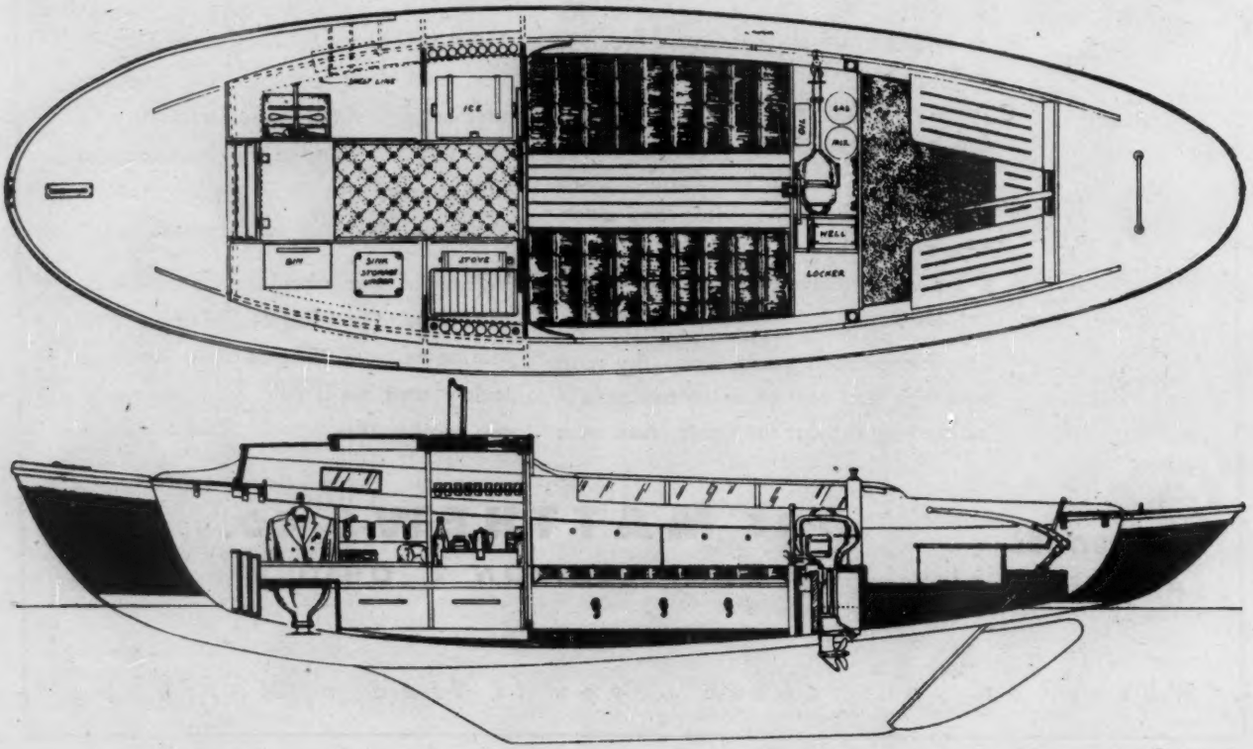
In designing a boat to meet the rather exacting requirements outlined above, her designer turned to a novel form of patented hull construction that he developed for use in his well known Dyer Dhow Junior. This little boat has been built for the armed services on a quantity production basis and has proven her capability under combat conditions. The dimensions chosen for the Dyer Dhow Senior are: l.o.a., 25′ 11″; l.w.l., 20′ 6″; beam, 7′ 6″; draft, 2′ 10″. Working sail area, 250 sq. ft., of which 185 feet are in the main and 65 in the jib. A genoa with 129 sq. ft. is also shown. A parachute spinnaker, while not shown in the plans, will be provided.

The Dhow hull form, as developed by this designer, has an exceedingly full deck line both forward and aft but fines down rapidly to the water line and has moderate displacement. This type of hull has been designed to lend itself to plywood planking with the result that the finished weight is kept down and a really watertight boat is turned out.

There are a number of other novel features in this design in addition to the hull form. Note the plastic lights let into the coaming so that passengers or crew will have a wider field of vision; the method of carrying the outboard motor and the way of dropping it through the well when it is wanted. This feature should appeal particularly to the sailor who dislikes dragging a propeller when it is not needed. The idea of making a third bunk in the cuddy by dropping the three covers (shown forward of the toilet) onto rails that will line them up with the toilet cover, thus making a full length bunk with an air mattress, is a novel one.

The cuddy cabin is equipped with ice box, storage space for cooking utensils, a dresser and a hanging clothes locker.

For cruising, an awning extending from side to side, held in position by battens attached to the under side of the boom, will form the sleeping cabin. Curtains are zipped to the awning and fastened along the coaming top.



...Such STUFF as dreams are made of...

You *can* make that dream real . . . that dream of a post-war boat!

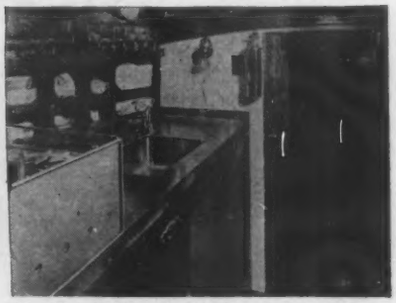
She can be trim and clean as you imagine her . . . no dirty water sloshing around in her bilge. She *can* purr along like a happy kitten . . . no engine clogging to stall her, or bent prop shaft to hang her up on perfect weekends.

She *can* . . . if you start her out right . . . if you really give that dream a chance. And one of the best starts you can give her is to use Monel, wherever a sea-goin' metal is needed . . .

1. For instance, consider the dream of a streamlined hull, skimming along as a powerful motor throbs. Screws or nails that can't stand the bite and drag of swift seawater can mean tie-ups for repairs (on the nicest days, usually). But for less than the cost of replacing a couple of sprung planks you can have a strong, tight hull with all-Monel fastenings.

2. Now, Monel precision-straight prop' shafts go into PT and other fighting craft to meet the bumps, jolts and sped-up corrosion of the coral-reefed South Pacific. Tomorrow, Monel shafts will give carefree pleasure craft the same rugged service that has won praise of PT commanders.

3. Sparkling, spring-clear drinking water . . . a dream? Not if the water tank's Monel! Whether it's holding waters or straining them, tough readily-welded Monel means fewer upkeep headaches. Monel also provides trouble-free gasoline tanks . . . no drips or leaks or scale to bother the pleasure-seeker.



4. "How to win a woman's heart". . . in One Act, One Scene: install a spotless, shining-clean Monel galley! Monel is the ideal metal for dozens of sea-goin' uses. Strong and tough, an unflinching enemy of corrosion, it makes pleasure craft truly *pleasure* craft.

THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street, New York 5, N. Y.

Monel *the Sea Goin' Metal*

GADGETS & GILHICKIES

A PERFECT COCKPIT COVER

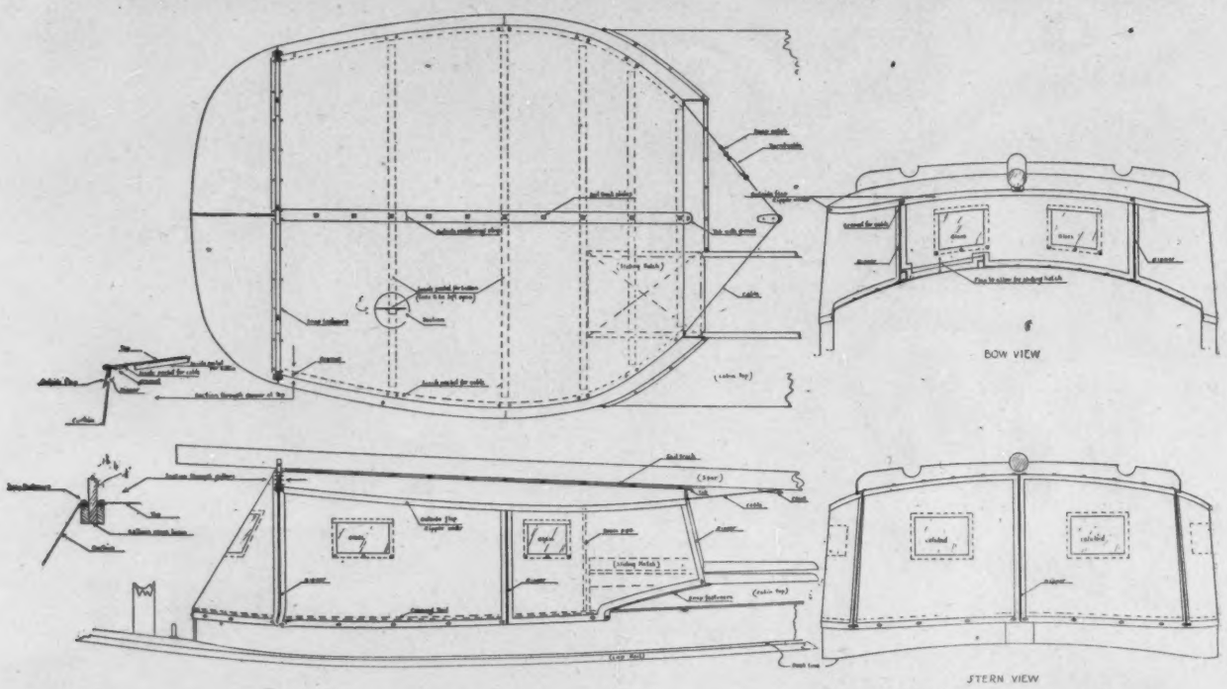
▶ The title of this description may sound a little too eulogistic but I think it is warranted, for of all the cockpit covers that I have ever seen (and I have seen a lot of 'em) this is by far the finest. It has everything that one could ask of such a shelter. It is easy to erect and to take down; it is absolutely wind- and watertight, even in a hard blow; it may be completely enclosed, partially opened, or its curtains may be removed so that the top serves merely as an awning. With its plastic windows, there is ample light and visibility from within and it is not difficult to come aboard through the zipper-operated entry flap. It is also easy to get forward in case of need by the same route. The use of ⅛" stainless steel wire rope at the edges and setting up this wire with a small turnbuckle helps to give the structure unusual stability.

This shelter is made of a fairly heavy grade of waterproof canvas, of an olive drab color. Transparent plastic windows are let into its side curtains, as shown. The *Blue Pigeon* (whose shelter this is) is yawl rigged so that it was possible to arrange sail track under the main boom to support the awning. In the drawing, this track is shown as one piece but actually there are a series of short pieces of sail track (each piece about 4" long) screwed to the under side of the boom. These are so located that they engage the slides which are sewn to the ridge of the awning. By this means it is much easier to assemble and dis-assemble the whole unit as it is not necessary to slide the awning along the under side of the boom for its whole length as it would be if the track were in one piece.

Blue Pigeon's main boom rests in a rugged gallows frame and this unit adds much stability to the whole shelter. At the outer ends of the gallows frame are located two strong bronze hooks to which small eye splices in the ends of the stainless steel edge wire (No. 6 x 16 ⅛" diameter) are hooked when erecting the shelter. This wire leads forward through an open hem in the edge of the awning and passes through slots in wooden fairleaders located at the top of pieces of ¾" brass pipe which are, in turn, screwed into deck flanges at the after corners of the cabin house roof. The guy wire then passes forward to a wooden cleat which is screwed to the under side of the boom. To port, there is a small turnbuckle fitted into the wire cable and also a stout snaphook for quick release. An inspection of the drawing should make this detail clearer. Adding further rigidity to the top is a series of strong battens which run athwartships in roomy canvas pockets. The ends of these battens are notched and fit over the stainless steel wire. The after end of the top is secured to the gallows frame by snap fasteners.

When the unit so far described has been set up (which takes only a few minutes), the top is held firmly in position ready to receive the side and bow curtains which are secured to it by the new jumbo zippers. These zippers are also used to fasten the side curtains to each other and to form an entry on the starboard side for easy access to the cockpit.

All the curtains may be rolled up against the under side of the awning or may be removed altogether by using the zippers. They are secured to the cabin top and cockpit coaming by snap fastners. The after curtain is a separate unit and is fastened with snap fasteners to both the after side of the gallows frame and to the coaming. Its corners zip together with the side curtains, completely enclosing the cockpit.



One of the secrets of the sucess of this enclosure is the wide outside flap that runs all around the edge of the top and completely covers the joint between the side curtains and the top. This is double and is securely stitched; it extends down far enough to prevent any rain from driving into the zipper, no matter how hard it blows. It is shown in detail on the left side of the drawing.

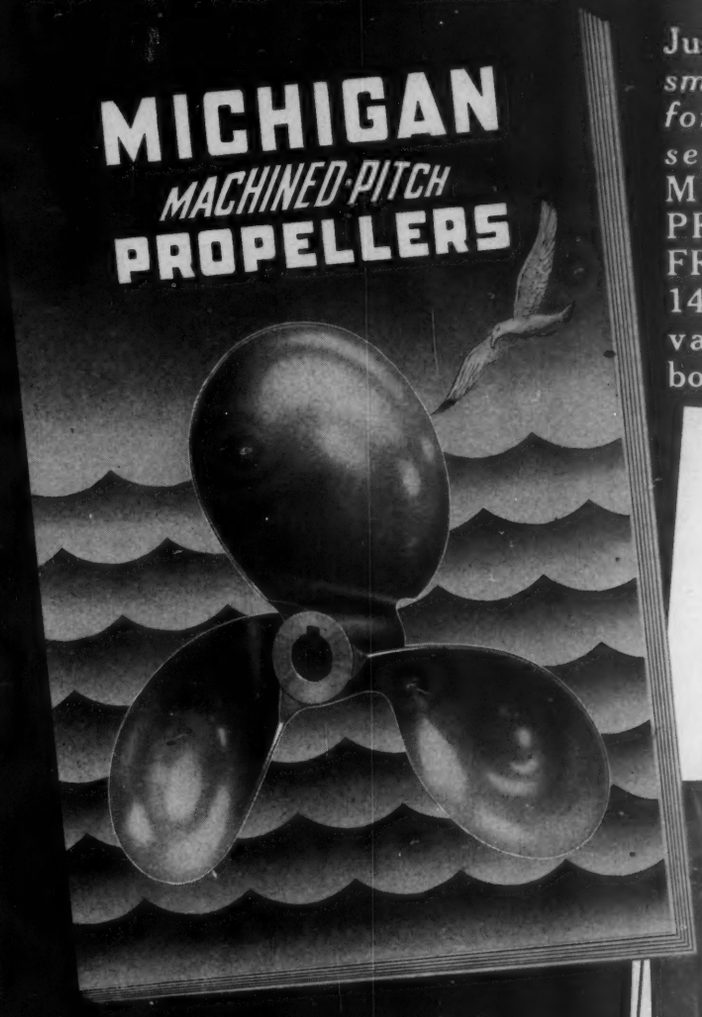
It is unfortunate that space does not permit reproducing the drawing on a larger scale, but with the use of a magnifying glass all details should be easily apparent. This shelter was tailored to fit a particular boat, as any worthwhile shelter should be. The principles involved in its construction, however, should be applicable to almost any boat. Our British contemporaries have long enjoyed making long cruises in short boats, and it is my belief that the development of such canvas shelters as this will do much to encourage that delightful sport here.

This design is the brain child of none other than Bill Dyer, of Warren, R. I., sometimes jocularly referred to as the anchorite of the Anchorage.

HAM DE FONTAINE

If You'd Like to KNOW

Just why you can expect *better, smoother more economical performance,* as well as *longer service* from MICHIGAN MACHINED-PITCHED PROPELLERS, send for your FREE copy of our Catalog No. 145 just off the press. It's a valuable guide to greater boating satisfaction.



OPERATING BALANCE

Essential to Smooth Vibrationless Operation

One of the most frequent causes of vibration, the destructive, annoying element that wracks the hull, power unit and nerves of the boat operator, is an unbalanced condition of the propeller, due either to faulty manufacture or subsequent damage.

Let MICHIGAN ENGINEERS

EXPERTLY ADVISE YOU IN OBTAINING THE PROPELLER BEST SUITED TO YOUR PARTICULAR HULL AND POWER UNIT!

The selection of a propeller is one of the most difficult

YES, IT DOES PAY TO BE FUSSY IN CHOOSING A PROPELLER!

The reputable marine architect

Watch Dogs of ACCURACY

For every propeller in the MICHIGAN line, whether for right or left hand

MICHIGAN PROPELLERS ARE MADE OF MICHALLOY

A TOUGHER, LONGER-LASTING METAL

Equally important to the accuracy with which a propeller is manufactured is the metal from which it is made. It must be of sufficient strength to

MACHINED-PITCH

The EXCLUSIVE MANUFACTURING PROCESS which enables MICHIGAN, alone, to GUARANTEE PERFECT ACCURACY of the finished propeller

MICHIGAN WHEEL COMPANY · Grand Rapids 3, Michigan

These are the Finest

. . . . Now available to civilian

THE GRAYMARINE LINE

*Models thus indicated are now in production, for current shipment.

Graymarine Gasoline Engines

REDUCTION GEAR RATIOS:
1.5:1, 2:1, 2.5:1, 3:1, 3.5:1, 5:1

Medium and Heavy Duty

for full throttle operation to 2000 rpm. in "Economy style," or to 3000 rpm. in "Hi-Speed" style.

	Cu. In.	H. P.	Lbs.
Light Four	88	7-16	330
*SeaScout	91	9-37	375
Four-22	112	12-45	410
Four-40	140	15-55	510
*Four-52	162	18-57	540
Six-51	200	20-71	650
*Six-77	226	22-90	665
*Six-91	244	24-100	795
*Six-121	330	36-124	1015
Super-Six	330	40-145	990

"Phantom Series" High Speed

For Runabouts and Hydroplanes, for best efficiency above 3000 rpm.

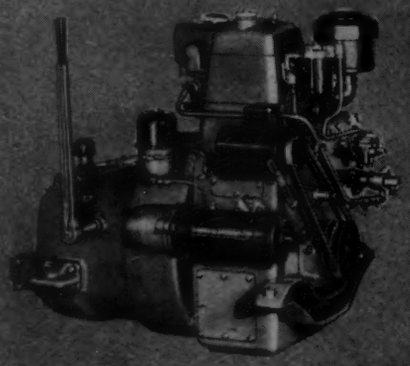
	Cu. In.	H. P.	Lbs.
Four-45	91	45	340
Four-62	140	62	435
Four-75	162	75	465
Four-88	162	88	465
Six-90	218	90	825
Six-103	218	103	630
Six-125	244	125	730
Fireball-140	244	140	730
Fireball-150	244	150	730
Fireball-160	244	160	730

Graymarine Diesels

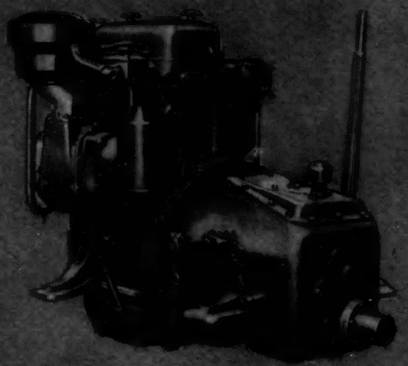
REDUCTION GEAR RATIOS:
1.5:1, 2:1, 3:1, and 4.4:1

These are the "Series 71" General Motors 2-cycle Diesel Engines, adapted and equipped for marine propulsion by Gray. All have bore of 4¼ inches and stroke of 5 inches. All models are fresh water cooled.

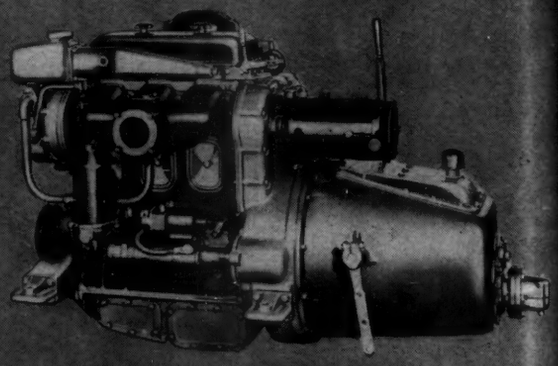
	Cu. In.	H. P.	Lbs.
*One-cylinder Diesel	71	25	1250
*Two-cylinder Diesel	142	55	1350
*Three-cylinder Diesel	213	82	1765
*Four-cylinder Diesel	284	110	2060
*Six-cylinder Diesel	425	165	2425



One-cylinder Model

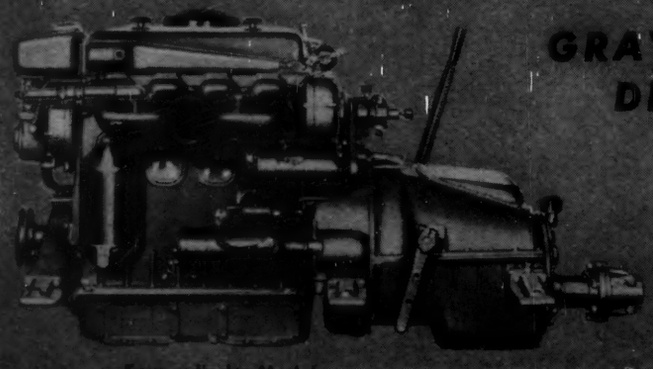


Two-cylinder Model

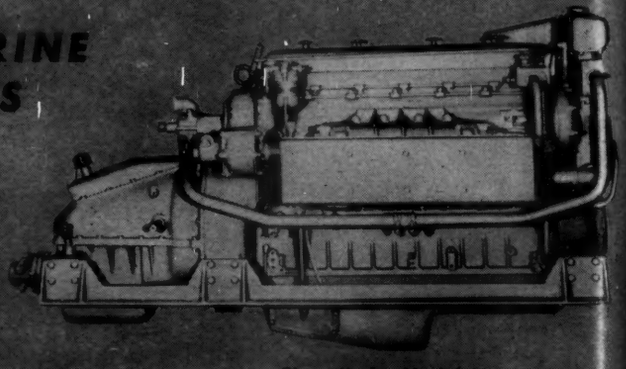


Three-cylinder Model

GRAYMARINE DIESELS



Four-cylinder Model



Six-cylinder Model

The men who are coming back deserve the

that Gray Ever Built-
users under priority regulations

When war was declared on America, Gray was producing 31 individual models, gasoline and Diesel, each designed to do a specific marine job. These highly developed engines comprising the Gray Line cover the useful power range from 10 to 165 h.p., high speed and low speed.

Representative models from this Gray Line were utilized for the needs of this amphibious war as standard equipment for the U. S. Army and U. S. Navy. Engines totaling over eleven million Graymarine h.p. have been supplied to the Allied Forces since Pearl Harbor.

These same engines which are in production on government contracts are now being shipped to individual users for essential replacements and for installation in new boats eligible for priority.

As soon as the materials situation permits, the complete Gray Line will again be available. Installation blueprint for any model will be mailed on request. Meanwhile, the Gray models which have done such a capable job in World War II are now being supplied to civilian users under priority regulations. Precedence orders will be honored. Your Gray Dealer has complete information on the procedure.

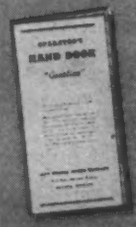
GRAY MARINE MOTOR COMPANY

Detroit, Zone 7, Michigan

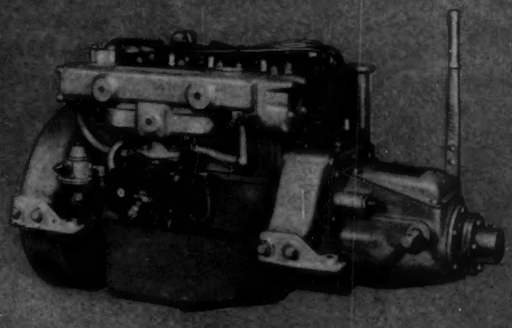
GRAY

MARINE MOTORS
GASOLINE
DIESEL

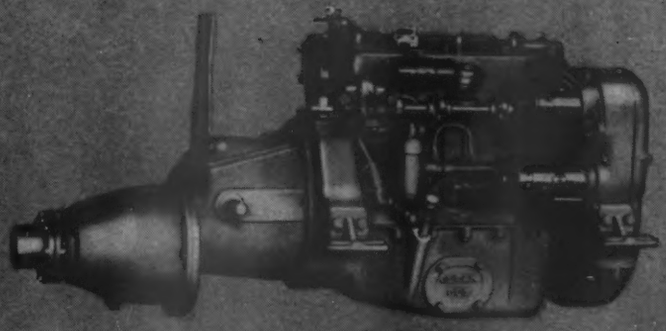
Awarded 4 Times
December, 1942
June, 1943
January, 1944
September, 1944



WE ARE MAILING this month, to each inquirer a copy of the Gray Data Book, 48 pages, containing specifications on all models and useful tables of propeller sizes; also the Gray Gasoline Engine Handbook, 64 pages illustrated. New edition now ready. No obligation, of course.

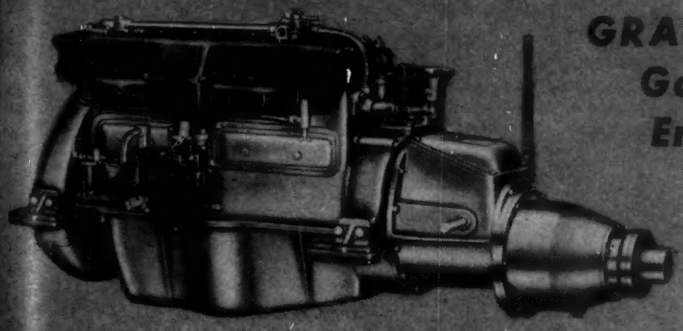


Model "Four-22"

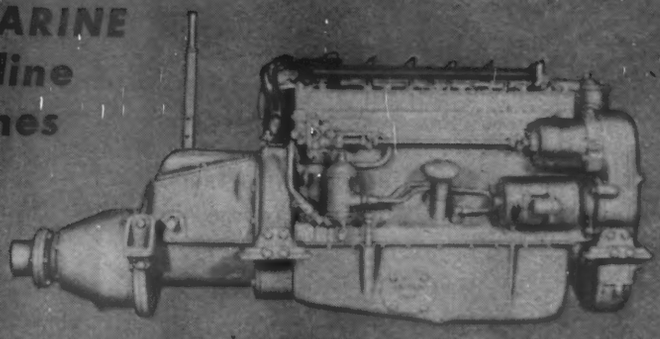


Model "Four-52"

GRAYMARINE
Gasoline
Engines



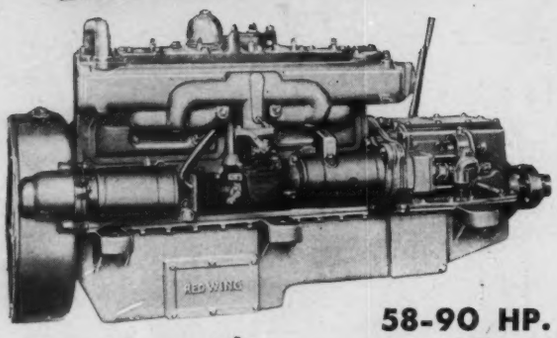
Model "Six-91"



Model "Six-121"

best, and Gray intends to give it to them

IT'S HERE NOW...
THE ARISTOCRAT OF CRUISER ENGINES



58-90 HP.

6-cylinder, L-head, 4" bore, 4¼" stroke, 320 cu. in displ., 1500 to 3000 rpm.

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Increased piston displacement gives it greater power—smoother, quieter, dependable power. Built stronger to last longer—with every wanted feature of modern design.

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For Runabouts...

a new lightweight, four-cylinder engine in the 100 cu. in. class.

For Runabouts, Cruisers and General Utility Boats...

a new lightweight, six-cylinder engine in the 200 cu. in. class.

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(a few available for essential needs)

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RED WING MOTOR CO., RED WING, MINNESOTA

UNDER THE LEE OF THE LONGBOAT

By SPUN YARN

SPEAKING of boats, I have on estimable authority the story of the steps that an Army captain took to rid a 40-foot motor launch of water that was accumulating in her bilge. It seems that, in a heavy gale of wind, the launch was picked up by a 25-ton crane to put her out of harm's way. A hard gust overturned the crane and the launch fell on to the beach, clear of the crane, but with her stern to the breakers. Spray began splashing in and the Army captain in charge of the operation hit upon a brilliant means for draining it out before it deepened enough to flood the engine. He sent for a carpenter with an auger and ordered the man to bore holes in the bottom of the launch. (No kidding.) The carpenter did as he was bid — reluctantly. Having bored three one-inch holes, he figured he had made himself sufficiently ridiculous and began to climb out of the launch. But the captain ordered him back to work, saying with profane imprecations that he guessed he knew what he was doing. Not only that. He ordered another man to attack the bottom of the launch with a pickaxe. . . . It mightn't have been a bad emergency idea if the tide had been ebbing!

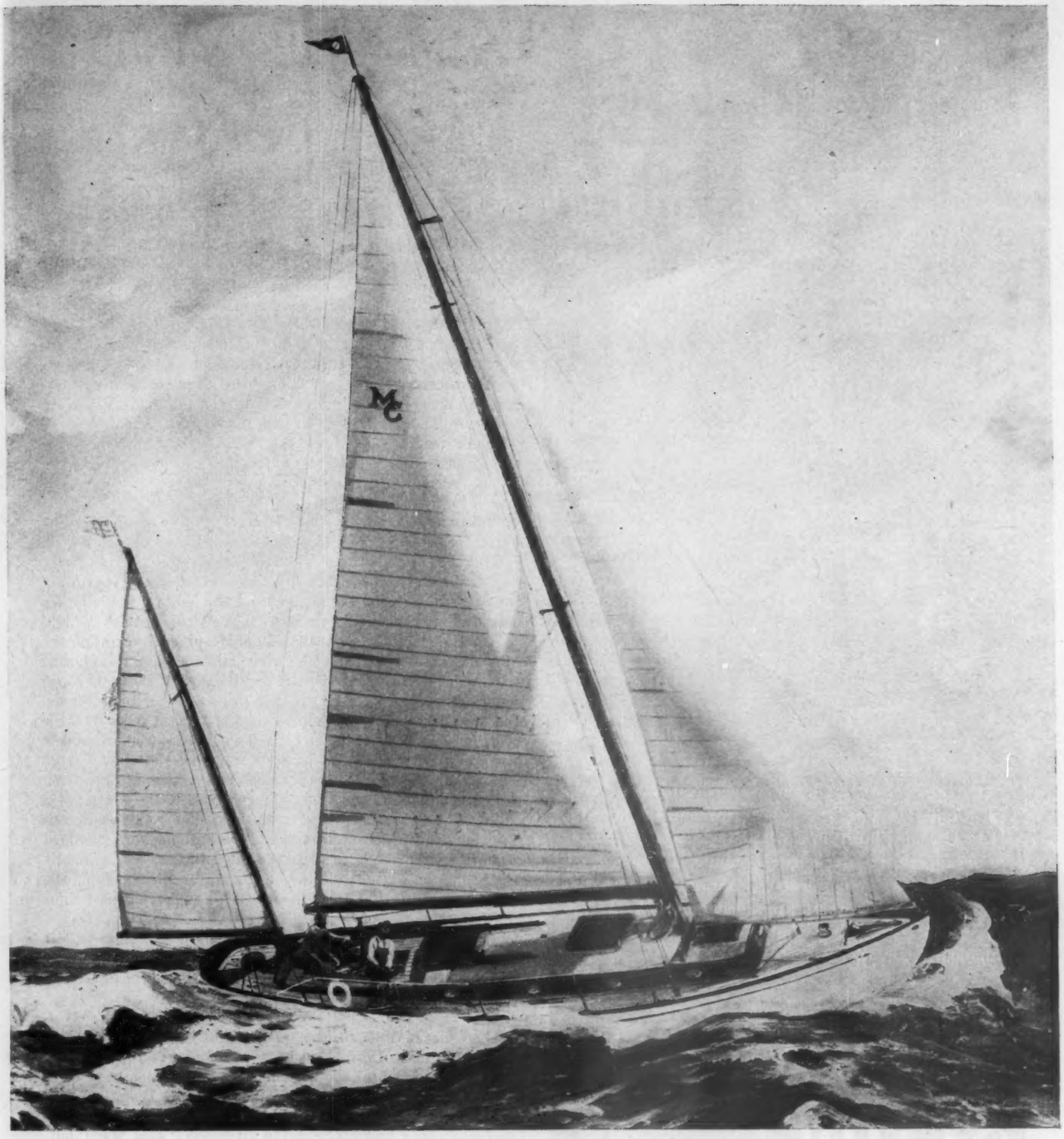
Lots of blokes who have fought this war even as you and I have been singing the praises of the jeep. I want to go on record right now, while my back is still unbroken and there is only a chronic crick in my neck, that I have christened my jeep with no endearing nickname. I don't call it anything. I don't even like to think of it. But at that I like it twice as much as a command car, and four times as much as one of those overgrown station wagons on a truck chassis that the Navy calls a carryall. Carryalls and reccos, as command cars are sometimes called to avoid confusion, are strictly anathema to me, because if I stop often enough to fill them with bluejackets or G.I.'s I might as well be a shuttle bus driver; and if I don't weight them down with live ballast I h'ist so freely that I might better wear a mustard plaster in the small of my back and stay in the sick bay. No, I prefer the wicked, straight-arm jab of the jeep to the up-from-the-deck haymaker of the command car.

But at that I don't like the jeep. Sure, I know it's got four-wheel drive and will plow through sand or mud almost up to its knees. I don't want sand and mud and am quite definite about this. I also know that the jeep is a rugged little son of the beach and will take any amount of punishment on roads that are pocked with chuck holes. But I prefer the velvet smoothness of an express highway back in the U. S. And if millions of guys after the war buy all the jeeps that haven't killed their drivers by rolling over on them in wadis or jungles and use them for picnics and other manifestations of masochism they'll do so without encouragement from me. I'll go back to pampering myself with a sedan that has a heater and automatic windshield wipers. I'll take a ride now and again without dressing in oilers, boots and long-handled underwear and making like I'm off to sea in a PT.

Little by little I learn the passwords. I've told you, I think, that a never-failing comfort in time of trouble in the U. S. Navy is:

"When in danger or in doubt
Run in circles, leap and shout."

Now I am informed that the counterpart of this jingle in His Majesty's Navy is even more succinct: "The bottom of the box is marked the top in order to avoid confusion."



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FOR FURTHER DETAILS WRITE TO:

MT. DESERT BOAT YARD . . . . . *Mt. Desert*
CAMDEN SHIPBUILDING CO. . . . . *Camden*
GOUDY & STEVENS . . . . . *East Boothbay*

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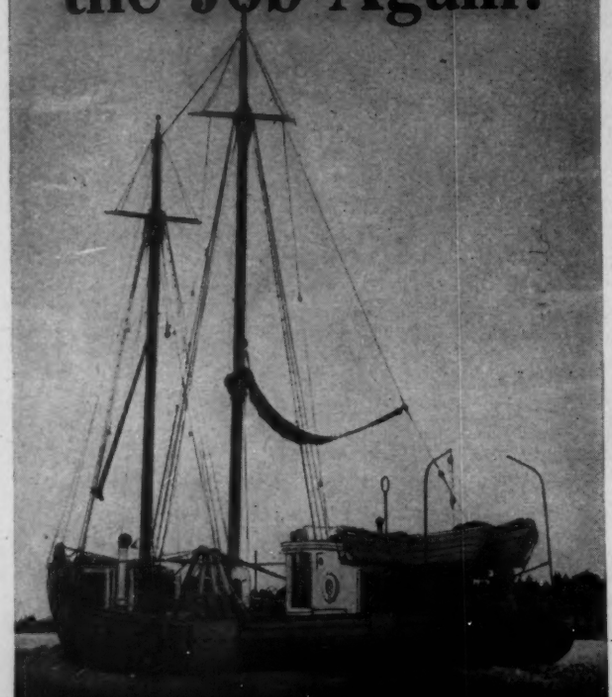
Members of Maine and Atlantic Coast Boat Builders and Repairers Association

She's Back on the Job Again!



THE *Caroline & Mary* was recently re-conditioned in our yard. We overhauled her 400 H.P. Diesels; built on a whaleback, re-rigged her; re-arranged the deck gear; made all necessary replacements; re-conditioned her throughout. Because we have complete, modern facilities, *the job was done fast!* And that's frequently a vitally important consideration.

FRANK L. SAMPLE, JR., Inc.

Shipbuilders

BOOTHBAY HARBOR, MAINE

Complete Modern Facilities for Designing, Building, Storing and Reconditioning Yachts and Commercial Vessels up to 200 feet.

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IN THE WIND

▶ A phone call in a highly patrician voice was made to one of YACHTING's editors the other day. . . . The lady on the wire said that a friend of hers, a member of the *Oyster Bay Yacht Club* (presumably the Seawanhaka) had suggested that she call YACHTING in her quest of a houseboat which she desired to purchase in order that she might hibernate in Miami, where the housing shortage is notorious at the moment. . . . Before the editor could reply, the lady went on to say that she positively *loathed* Miami and the idea of wintering there. . . . "Then why do you consider it?" said the editor. . . . "Because one MUST go south for the winter, mustn't one?" answered the dame, in dulcet tones. . . . The tactful editor told her that she might conceivably find the craft she wanted by consulting a yacht brokerage firm. . . . "But I don't *know* any, my dear," countered the damsel in distress. . . . "A number of them advertise in YACHTING," said the editor with superb aplomb. . . . "But I never READ YACHTING!" said the lady, thereby giving the editor a legitimate excuse to hang up — which he did without the slightest compunction.

▶ I'm indebted to Jerry Knewston, of Milwaukee, for the following review of a book recently published on the *Songs of the Sailing Days of Great Lakes Sailors*. Quoting, it says, "On the sailing ships of the Great Lakes sailors chanted the rhythm of the captain weighing the anchor, and the haul on the halyards as they mastheaded the yards to the beat of 'A-hay! A-high! A-ho-yo!' They set sails to the solo of 'Haul on the bowlin', the fore and maintop bowlin' —' while all joined in the chorus: 'Haul on the bowlin', the bowlin' haul!' Most of these old songs sound harsh and feeble in the cold print of collectors' albums. But when the watch was aloft belaying a main sheet off Milwaukee Harbor, or when one big sail was spread to port and the other to starboard with a lubber's wind dead aft down Lake Huron and the watch had a moment to smoke and relax, even the most limping of the songs sounded good in the ear."

"The item about the 'rhythm of the captain' made me wonder whether or no a pitch pipe and metronome were standard master's equipment in the days of sail on the lakes," comments Mr. Knewston. "And the bit about the watch aloft belaying the main sheet gave me pause to mourn the fact that that particular breed of seaman is evidently gone for good. . . . It has been a mighty long time since a main sheet has been belayed aloft hereabouts."

I haven't seen the book but, if the quotation is typical, maybe it should have been titled "Lubber Lines."

▶ The Chicago Y.C. *Blinker* reports that Clare Udell made a special pilgrimage Down East to take a gander at Billy Luders' two new experimental one-piece molded hulls which have been described in YACHTING. . . . "I crewed aboard *Temptress* (the open job) in a match race against *Invader* (the cabin job) at Larchmont on a beautiful Sunday afternoon," said Mr. Udell. . . . "Billy sailed *Temptress* and Sherman Hoyt *Invader*. . . . Bill let me sail the last part of the windward leg and I want to say that I have never been at the helm of a sweeter handling boat. . . ."

HAPPY THOUGHT DEPARTMENT

▶ "A Coast Guard crew went out to rescue Ensign Frank Sprague and his sister-in-law, Mrs. Norma Sprague, after their sail boat capsized in a storm on Lake Michigan recently, off Michigan City, Ind.

"The sail boat rammed the Coast Guard boat as the former was being towed into port. The C.G. craft began sinking but managed to dock before she went down.

"While she was being raised for repairs, a crane collapsed." — from *Midwest Aviation & Yachting*.

Incidentally, what happened to the Sprague?

TELLTALE

SIXTY-THREE FOOT ARMY AIR FORCE RESCUE BOATS PAINTED FOR HERRESHOFF BY DUNCAN GLEASON

• *At the Right Spot at the Right Time* •

That they may live to fly again

Taking over, when the parachute's job is done, these fast, seaworthy Herreshoff-built Army Air Force Rescue Boats bring first-aid to our Fliers forced down at sea.

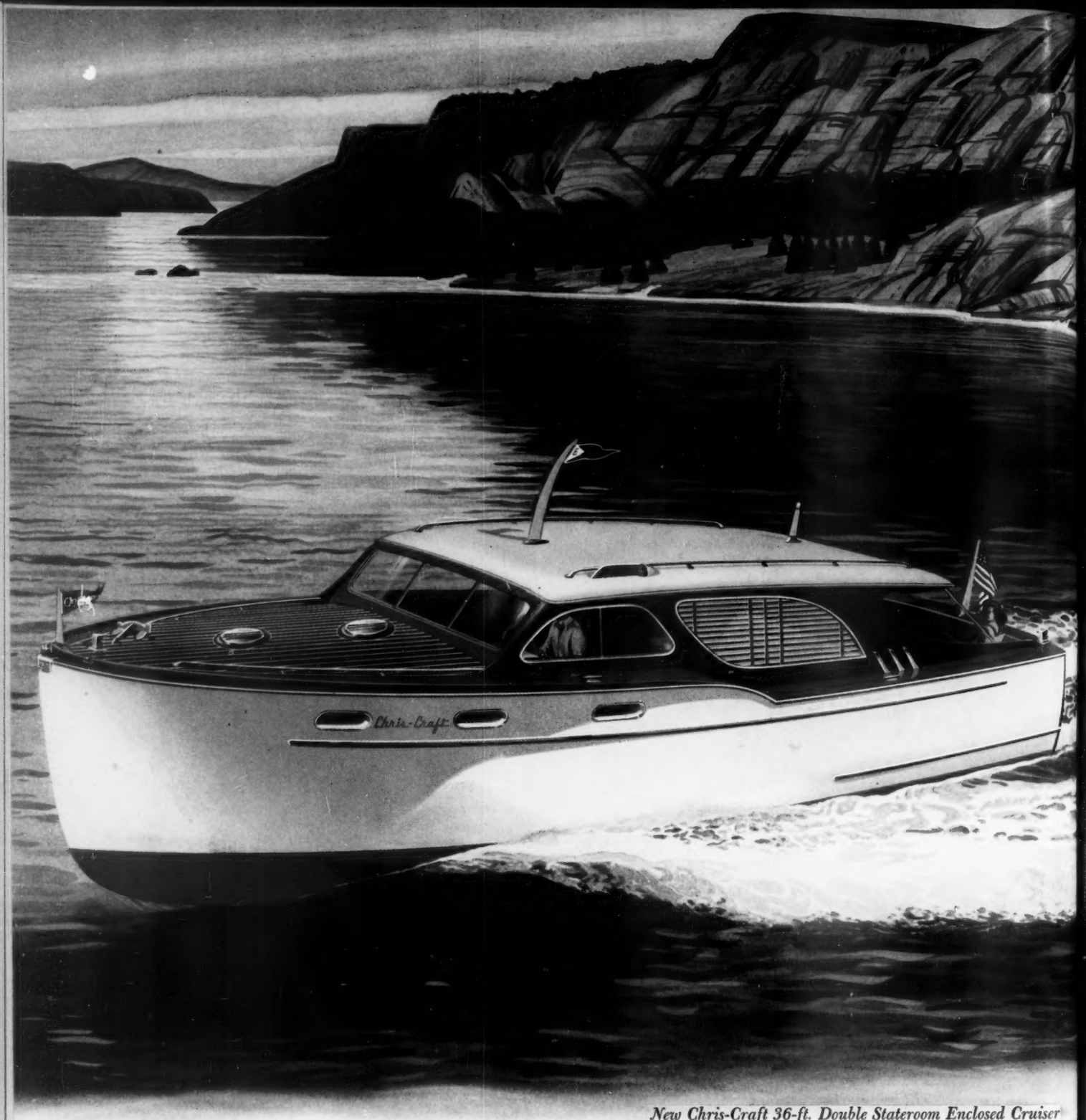
The painstaking skills of Herreshoff craftsmen could serve no finer purpose.

Herreshoff

SHIPYARD

BRISTOL, RHODE ISLAND

BUY WAR BONDS



New Chris-Craft 36-ft. Double Stateroom Enclosed Cruiser

And even this picture does not tell the story. For there are 2 complete staterooms forward . . . built-in dinette . . . complete ship's galley . . . you can sleep 6 in solid comfort and cruise where you choose at speeds up to 23 m. p. h. Ready after Victory. See your Chris-Craft Dealer for details. . . . We are 100% on war work now.

Buy U.S. War Bonds Today—

Tomorrow command your own

Chris-Craft

CHRIS-CRAFT CORPORATION, ALGONAC, MICH. ★ WORLD'S LARGEST BUILDERS OF MOTOR BOATS

With the UNITED STATES POWER SQUADRONS

SQUADRON ACTIVITIES IN 1944

▶ The concluding paragraph of my acceptance address to the members of the United States Power Squadrons in January, 1944, states " . . . with every member at station and ready to do his duty, there can be no doubt that the good ship *USPS* will return to port after a year's voyage with the ensign flying higher than ever." Facts bear out that prediction.

The year of 1944 is now history and the voyage completed and, in spite of heavy burdens carried by members in their daily life, their Squadron duties have not been neglected. My fellow officers, the chairmen of our administrative and educational committees, as well as their committee men, have given generously of their time.

To administer the affairs and develop policies for an organization of ninety-odd units located along the Atlantic and Pacific seaboards as well as on the Great Lakes and rivers of our continental United States there exists our Governing Board. Month after month the governors, many living at great distances, travel to New York City in the Squadrons' interest. To mention a few of the activities of this board during the year just closed, it has:

Directed the appointment of an educational survey committee to effect coördination of our various courses.

Proposed to our membership amendments to our constitution.

Considered the recommendations received as a result of district conferences held annually in each of our 15 Districts.

During the year the first trust fund was formed. The late Henry A. Jackson, N., charter member and beloved by all, bequeathed to the USPS the sum of $5,000. The Governing Board, in accepting this legacy, directed that it be segregated from other Squadron funds and be known as The Henry A. Jackson Memorial Fund.

The committee on admission has thus far examined and admitted over 1500 members as pilots, this year.

The committee on advanced grades responsible for the three following courses, viz.: Advanced Piloting, Junior Navigation (dead reckoning), and Navigation has handled hundreds of examinations for members desiring to advance their grades. It is interesting to note that our syllabus was built upon that given to midshipmen at the U. S. Naval Academy.

The special course committee, charged with instruction in seamanship motor mechanics, signalling and developing visual aids, is about to release a complete course on "Weather."

To any member of our armed forces on full time with pay, our regular courses are open under the chairmanship of the war course committee. Refresher courses in navigation have been developed for officer personnel in cities such as New York, Philadelphia, Wilmington, Delaware; Baltimore, Washington, D. C.; Miami, Detroit and Seattle. Attendance has been large.

Public relations are handled by a committee with representatives in each of our 15 districts. A new departure, this committee has made rapid strides in assisting local squadrons by informing the public of squadron activities. However, no solicitation to join is made. Ability to pass the entrance examination plus approval by the executive committee of a local squadron is the requirement for membership. A high quality is sought rather than a huge membership.

These activities have been carried on albeit about 25 per cent of our membership of 11,300, an all-time high, is in the armed services, most of them with commissions. And, while cruising has been at almost a standstill, an astounding number of piloting contests and rendezvous have been held despite the shortage of gasoline.

BERTRAND PERRY,
Chief Commander, USPS

DEKTRED*

The non-slip, protective covering for decks, roofs, cockpits and other spaces where firm footing is helpful

Trowel or spray DEKTRED to a thickness of only 1/32 to 1/16 inch. The fluid sets to a tough film that adheres like all-get-out to wood, steel or canvas.

Trapped in the film are many fine particles which provide a non-slip surface—just the right amount of grip without being so rough as to be unsightly. Surface is actually more non-slip when wet than when dry.

• RESISTS OIL AND COMMON CHEMICALS
Not affected by grease, oil, mild acids, alkalies, sunlight or salt water.

• STAYS PUT IN HEAT AND COLD
No change in wide temperature variation from minus 40 to plus 160 degrees F.

• EASILY APPLIED
No uncommon skill is needed for either troweling or spraying. Drying time is from 2 to 8 hours, depending on conditions.

• NOT A PAINT
DEKTRED is tough. It is meant to be walked on. It is put down in a manner that produces a strong bond to the material under it. Its purpose is to combine safety with a long-wearing, continuous, protective covering.

ASK YOUR DEALER—if he cannot supply you immediately, have him write for literature and samples.

*DEKTRED is a trade-mark of Goodyear Tire & Rubber Co. The product was developed for exposed decks and interior spaces of combat and cargo ships, and many thousands of gallons have been used in both small and large areas. Reports from owners and operators of small boats show how useful DEKTRED is.

ADDRESS INQUIRIES TO DEPT. 104 FOR OUTSTANDING ACHIEVEMENT

SELBY, BATTERSBY & COMPANY
WILFORD BUILDING, 33rd and ARCH STREETS, PHILADELPHIA 4, PA.

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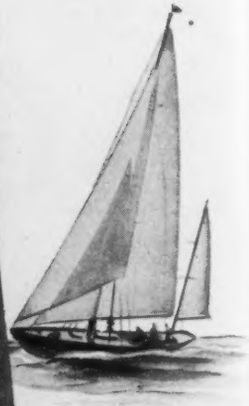

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VICTORY BRINGS "FREEDOM AFLOAT"

Plan Tomorrow's Boating Pleasure with Marine Engineered Equipment

Ahoy, Skipper! Get ready for fun!

Some of these days . . . not far off, we hope . . . you'll again be heading your boat into open water; free to set your own course in your own little world apart; once more to enjoy the thrill of "freedom afloat" which every boatman feels at the wheel of his own craft.

When you ride the waves again you'll be wanting new, modern boat gear . . . developed since you were beached . . . to make postwar boating an even greater pleasure than yesterday — and safer too!

In Marine Products engineering laboratories a lot of things have been happening . . . things you'll be hearing about before long . . . marine engineered equipment and accessories we've been developing, testing and getting ready for the big day when you can fit out your old boat or build a new one.

Leading marine supply dealers and boat builders will be waiting to show you all the new M-P products for your postwar craft.

MARINE PRODUCTS CO.

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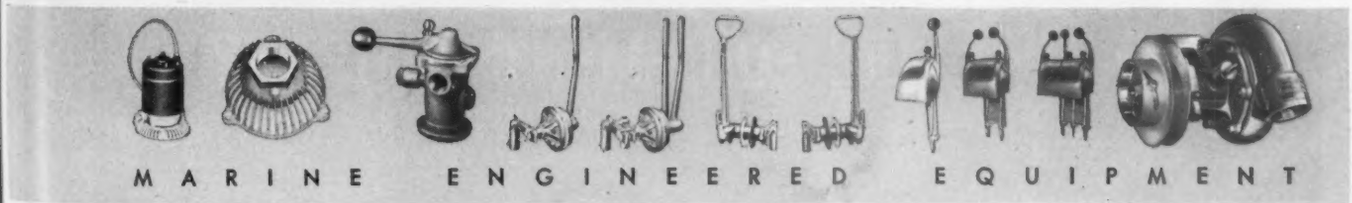
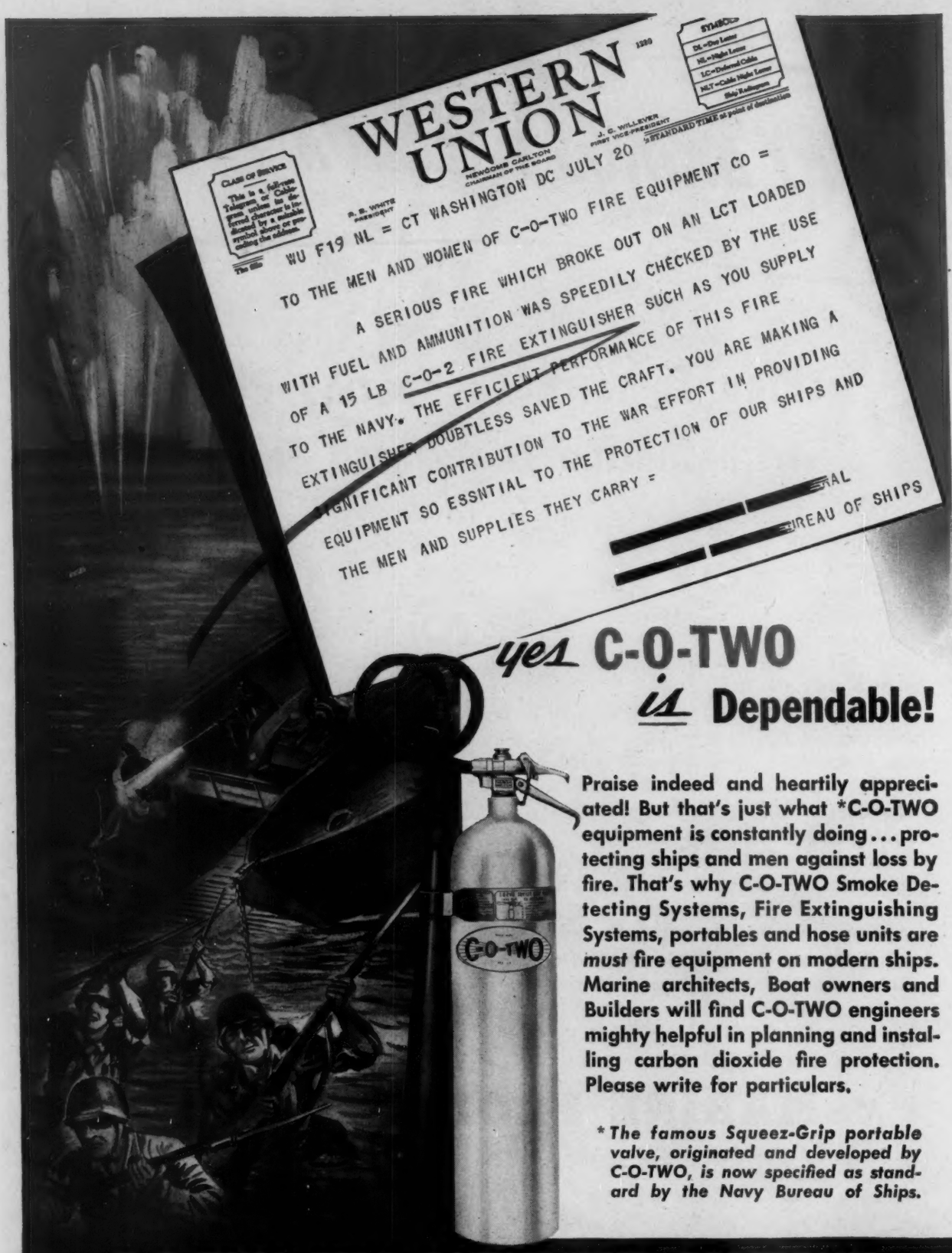


MARINE ENGINEERED EQUIPMENT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FIRST VICE-PRESIDENT
STANDARD TIME at point of destination
CLASS OF SERVICE
WU F19 NL = CT WASHINGTON DC JULY 20
TO THE MEN AND WOMEN OF C-O-TWO FIRE EQUIPMENT CO =
A SERIOUS FIRE WHICH BROKE OUT ON AN LCT LOADED
WITH FUEL AND AMMUNITION WAS SPEEDILY CHECKED BY THE USE
OF A 15 LB C-O-2 FIRE EXTINGUISHER SUCH AS YOU SUPPLY
TO THE NAVY. THE EFFICIENT PERFORMANCE OF THIS FIRE
EXTINGUISHER DOUBTLESS SAVED THE CRAFT. YOU ARE MAKING A
SIGNIFICANT CONTRIBUTION TO THE WAR EFFORT IN PROVIDING
EQUIPMENT SO ESSNTIAL TO THE PROTECTION OF OUR SHIPS AND
THE MEN AND SUPPLIES THEY CARRY =
BUREAU OF SHIPS
C-O-TWO

yes C-O-TWO *is* Dependable!

Praise indeed and heartily appreciated! But that's just what *C-O-TWO equipment is constantly doing... protecting ships and men against loss by fire. That's why C-O-TWO Smoke Detecting Systems, Fire Extinguishing Systems, portables and hose units are *must* fire equipment on modern ships. Marine architects, Boat owners and Builders will find C-O-TWO engineers mighty helpful in planning and installing carbon dioxide fire protection. Please write for particulars.

The famous Squeez-Grip portable valve, originated and developed by C-O-TWO, is now specified as standard by the Navy Bureau of Ships.

C-O-TWO FIRE EQUIPMENT COMPANY

NEWARK 1 NEW JERSEY

Sales and Service in the Principal Cities of United States and Canada

AFFILIATED WITH PYRENE MANUFACTURING COMPANY

The New TRUMPY 55-ft. Diesel Cruiser

Deck House
Living Room
looking forward

After Stateroom
looking aft

Spacious Afterdeck

ARMY E NAVY

The last word in cruising comfort and economy, culminating 36 years of designing and building this particular type in various lengths.

Descriptive illustrated literature on request.

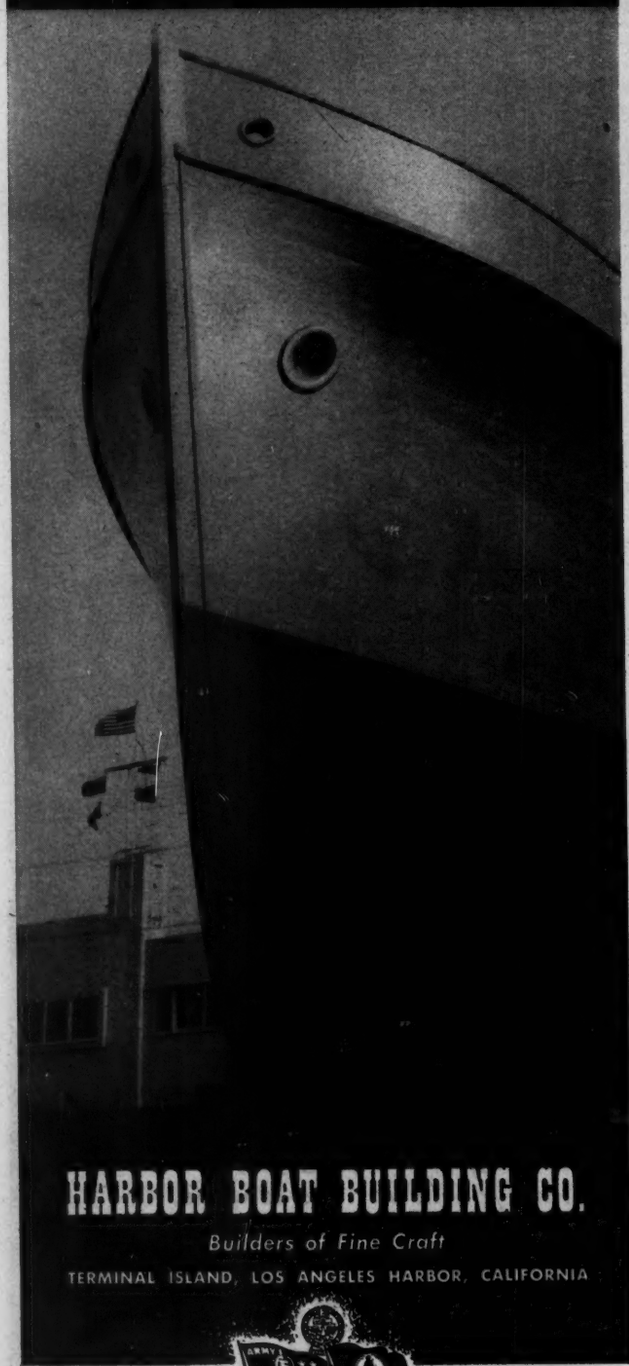
JOHN TRUMPY & SONS, INC.

GLOUCESTER CITY, *formerly* MATHIS YACHT BUILDING CO. NEW JERSEY

THE BOATS OF THE FUTURE ARE BEING BUILT NOW

By HARBOR BOAT BUILDING CO.

The boat shown below, designed and built by HARBOR BOAT for the U. S. Navy will be used as a refrigerated tuna clipper after the war — one of many commercial and pleasure craft which will be constructed on principles acquired through our experience in building war craft for our fighting forces.



HARBOR BOAT BUILDING CO.

Builders of Fine Craft

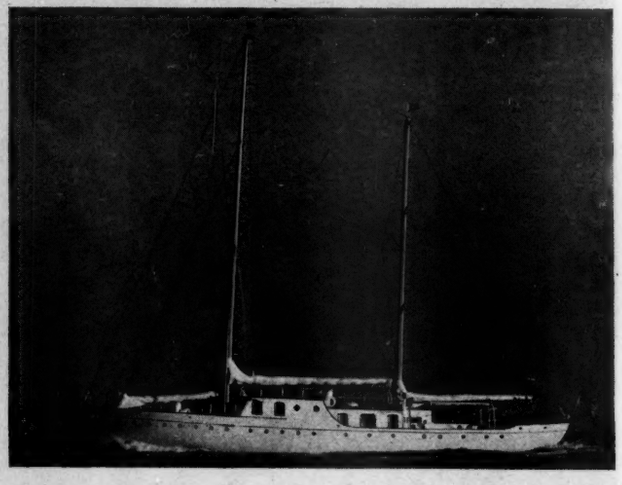
TERMINAL ISLAND, LOS ANGELES HARBOR, CALIFORNIA

YACHTING AFTER THE WAR

(Continued from page 56)

at the same time would help the reabsorption of manpower into civil jobs when demobilization comes. Now is the time to plan for them.

And that, boys, is a general picture of the immediate future of postwar yachting as we see it. We believe, and hope, the development of the postwar boat will be along sane lines. Some of the starry-eyed dreams of the boat of the future which have been publicized will fade with the coming of the day. Many of the extravagant concepts of design and methods of building will prove impracticable against the cold logic of fact. While they served their purpose, perhaps, of getting us all out of the rut of conservatism, when it comes to the boat of the future we believe that designer and builder alike will turn out "a ship as looks like a ship," and, we believe, that will act like one when afloat. They must do that if yachting is to fulfill its high destiny.



"Vagrant," the last prewar motor sailer, built for Harold S. Vanderbilt. The postwar period may not produce many yachts as large as this but the type, in smaller sizes, is growing in popularity

WHAT OF TOMORROW'S BOAT?

(Continued from page 59)

larly tough and durable. Which brings memories that, as a child, the writer built model speed boats by this method; the wooden model was well oiled with linseed, covered with a parting of wet tissue paper, then strips from the back of a much laundered shirt were sopped with starch and plated smoothly over the model. Local stiffening was secured by inserting, between layers, a properly shaped piece of cigar box wood at the transom and step plus a length of broom wire at the gunwale. After baking in the kitchen stove, trimming off the surplus at the sheer and withdrawing the mold, a little paint completed a surprisingly light and rigid hull.

There are a number of other items that promise to have a profound influence in boatbuilding, many of which are still in the development stage or are of too recent origin to have reached beyond the war effort. Among such are Superwood and the agency of the urea salts. These offer startling possibilities as, for example, changing an inferior timber into a perfect stock of greatly enhanced physical properties and at the same time imbuing it with permanent colors and finish.

Most of the materials mentioned in the foregoing are either relatively new, are undergoing development or in some cases are nebulous. They are of the tempo of the times and smack of new and extended horizons. But quest of the new must not overlook new applications of the old and the established. For years the Aluminum Company of America, having an abiding interest in seaplane hulls and boats in general, has engaged in constant research striving to improve aluminum for salt water use. Its new alloy, 61ST, seems to be the answer. Of its complete adaptability to fresh water there can be no question and seven years of testing in salt water have been most successful. This benevolent

material, which has done so much to make the world brighter, is destined for wide use in postwar boats. It is believed that many smaller types such as small sail boats, canoes, dinghies and rowboats will be fashioned out of aluminum in the near future. Besides extreme light weight these boats will be smooth and tight and, of much importance in many classes, very likely they may come with safety flotation tanks.

Much of the serious thinking and planning in the field of new materials has been directed to the smaller classes. This is logical since the small classes have constituted the best possible proving ground. It does not follow, however, that what may be perfect for the smaller classes is necessarily appropriate for larger vessels. Further, the owners of small boats, being close to them, can be expected to take an active interest not only in development but in reporting performance and promoting improvement. For the larger auxiliaries and motor cruisers, the best postwar boat is likely to be the best prewar boat you knew, with, of course, minor improvements. Novelty for novelty's sake alone is a doubtful measure, even stupid. Accordingly, if some totally new material or methods of construction are advanced for these larger classes, they will not receive public acceptance unless they are incorporated in sound design and offer conclusive evidence that either they are definitely better or, if of equal structural soundness, they can be produced more economically. The public has long since come to appreciate the value of proper design and it is expected that the yacht of the future will reflect an increasing regard for this basic fundamental. One shudders to recollect the display of misguided efforts found in every anchorage with the consequent waste of good material. Standardization by the manufacturers and by organized classes has done much to relieve this situation, and certainly there is no reason why the individual custom-built boat should not be entirely correct in all her details and in her every department.

During the past three or four years there has been little opportunity to think about yachts and the term has become somewhat archaic. This is as it should be, since nothing should be allowed to interfere with our combined efforts for a speedy victory. From questions asked by many not fully familiar with the war activities of naval architects, it is easy to see that these persons are not aware of the extent to which the profession is participating in the present struggle. As an example, a glimpse of the work that is being done in this connection may be gleaned by a brief review of the work of the writer's own organization.

At the beginning of this emergency, anything that did not contribute directly to the war effort was dropped completely and full energies were devoted exclusively to the defense program, which happily has now changed to a victory program. An increased staff totaling 500 has worked solely to meet the demands of the Navy and Army and the various agencies of our Allies. Branch offices were of necessity established on the West Coast, in several East-Coast cities and at other points in close proximity to some of the major projects. To date, this work has involved some 600 ships, comprising everything from converting yachts into gunboats up to and including the conversion to troop transports of vessels such as the *Normandie*, together with combat loaded troopships, patrol craft, minelayers, aircraft carriers, attack ships, tugs, cargo vessels, hospital ships, and almost every type of naval auxiliary. The demands have been heavy and the work exacting; in spite of which everyone who is participating has a feeling of satisfaction that these efforts have contributed to the good of the cause. From a broader viewpoint, a number of vessels are being built with an eye to peacetime service which in no way vitiates their utility as auxiliaries in the prosecution of the war.

It is recognized that the current struggle and the postwar readjustment are focused in the same over all picture and, although the fight is still on and the road to victory will be a hard one, our leaders are already directing their thoughts and bending their efforts to provide for the day when hostilities cease. Those charged with such things realize that the smaller businesses are scheduled to be the first to complete their war tasks and among these are the boatbuilders, than whom no unit group in this vast war machine merits greater credit. For those builders who have completed or are about to complete their war work, the postwar period is of immediate interest and concern.

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AGENTS IN EVERY IMPORTANT PORT

Many communities depend in large measure on the continued prosperity of the local shipyard. There is every reason to believe that, just as soon as scheduled materials are released for public consumption, these builders are going to be kept busy and that the postwar period will see a tremendous boom in yachting.

While the designer has had little time, inclination or opportunity during the past few years to give any consideration to yachts, a daily increasing volume of mail forecasts this boom as inevitable. The gist of these letters presents legibly the kinds of boats about which the yachting public is thinking. The smaller sizes will, of course, predominate although the range will be complete. Small boats of all types are going to be used throughout the country in quantities never before approached. The standardized motor cruiser will flourish and, as usual, the range from 35 to 60 feet will be the most popular. However, a number of larger motor cruisers are scheduled. In the auxiliaries, there will be a big growth in classes from 25 to 30 foot water line. Almost as many yachtsmen are talking in terms of auxiliaries up to 50 foot water line and orders will be placed for many of this type in still larger sizes. There is a tremendous interest in one-design racing classes where the boats are of sufficient size to offer limited cruising accommodations — boats between 18 and 25 feet water line. There will be an increasing use of steel in the larger vessels, for which it is ideally suited.

In all types, the owners are interested in and will enjoy the benefits of progressive development and, by and large, are anticipating some of the innovations that have been discussed here. The older school will no doubt object to some of these things but sentiment alone will wage a losing battle. Rebellious resistance to the modern is not a new thing.

INDIAN SUMMER CRUISE

(Continued from page 62)

trollers we passed far offshore, a long sleek schooner driving by, lee rail awash, all canvas full and drawing. In fact, several of the little fishing boats with outriggers holding lines in all directions seemed to change course purposely so as to pass close astern of us and we exchanged hails with a few of them. These Oregon coastal waters north and south from the Columbia River are well known for fine salmon fishing and we had good luck with a single trolling line and silver spoon. Fresh salmon steaks, hot and sizzling in butter, were a delicious treat.

Indian summer sunsets flared across the sky, bringing all hands on deck as wind clouds on the horizon colored vividly, even tinting the breaking seas and *Renegade's* white sails. At night, the stars were sharp and clear in the crisp northern air, the Dipper and Pole Star riding high overhead, Orion and Sirius rising late. Night tricks on deck were cooler now as the northwester was cold but it was a fascinating experience to be able to switch off the binnacle light and steer in darkness, guided by a bright star seen through the forward rigging. There is something deep and mysterious about a moving ship at night, particularly when the water is so close as from a yacht's deck, with the wind singing through the shrouds and a phosphorescent wake trailing far astern. We did not see land for four days, the presence of fog off the mouth of the Columbia River making it prudent to stay well offshore.

Our next landfall was on Washington's rockbound coast. Destruction Island bore off to starboard, and the terrifying array of jagged rocks and pinnacles backed by perpendicular cliffs with spray shooting far up in the air greatly impressed the California contingent. Mount Olympus showed white with snow in the distance, ideal for pelorus bearings. Our landfall placed us twelve miles south of our position by dead reckoning, the error being in not allowing enough for southerly drift, so the skipper stoutly maintained. A strong breeze and heavy fog kept a double watch on deck most of that night as we beat up for Cape Flattery but the fog blew away in the morning and a brisk northwest wind and bright sunshine made this often difficult entrance into Juan de Fuca Strait so easy that we regretted leaving the Pacific. Gamwell was so elated at finally getting his ship into home waters that he broke out a bottle and all hands

(Continued on page 138)

Chemold*

OUTBOARD RUNABOUT

S*peed with safety* in this 14-foot Chemold plastic craft. Constructed throughout of tough, enduring Chemold. One-piece hull means no seams to open—no caulking, no leaks. This runabout has *built-in buoyancy* which makes it non-sinkable. Because the Chemold hull will not absorb water, the boat is 20 to 33⅓% lighter than comparable wood constructed boats. Its "smooth as glass" bottom promotes speed and ease of driving. A specially designed keel and chine practically eliminates skidding on turns. Form-fitting Chemold plastic seat assures the utmost comfort.

Here is another unique Chemold boat that promises fun for all. Designed for speed along the lines of a National Championship boat, it is a safe, fast, sturdy, dry boat that will take the wide open driving of the large outboards.

If you would like to own this boat, read below about Chemold Company's unique Priority Plan.

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Among other Chemold Company boats are the family fishing boat, speed boat, kyak, canoe, convertible cruiser, duck boat, shore boat, dinghy, top-o-car boat.

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PRIORITY PURCHASING PLAN—The Chemold Company has a Priority Purchasing Plan. If you are genuinely interested and sincere in your plan to purchase any Chemold boat, write today and ask for your priority certificate, *specifying type of boat you want.* This carries a number representing your position in the sequence of orders received. No deposit necessary. Early action is desirable.

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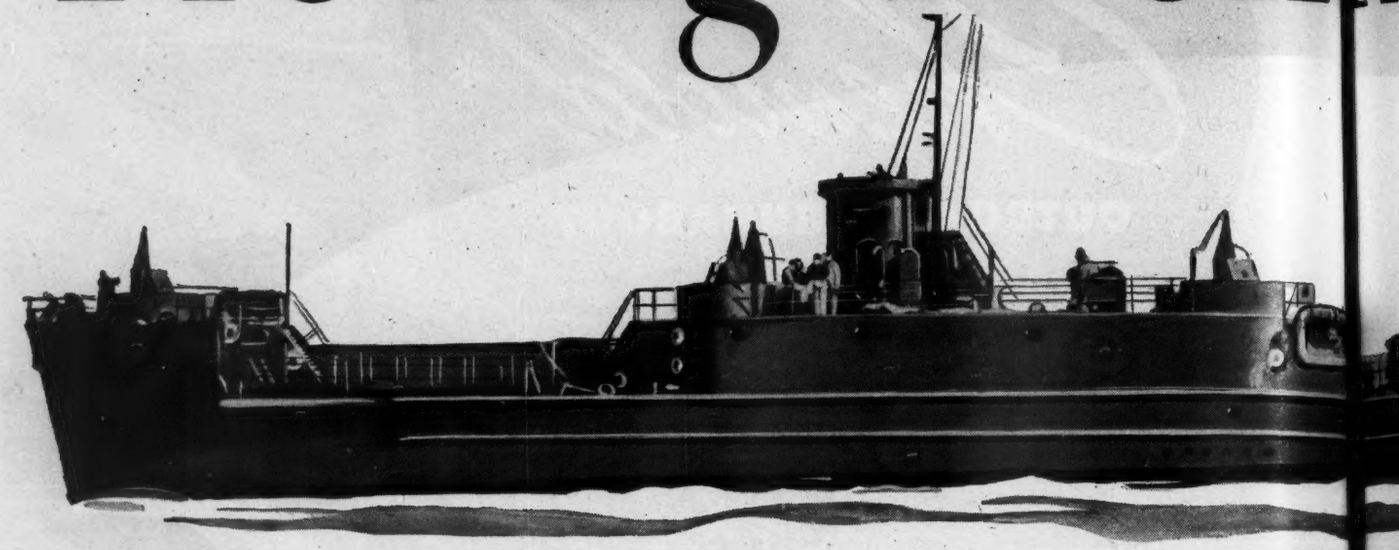
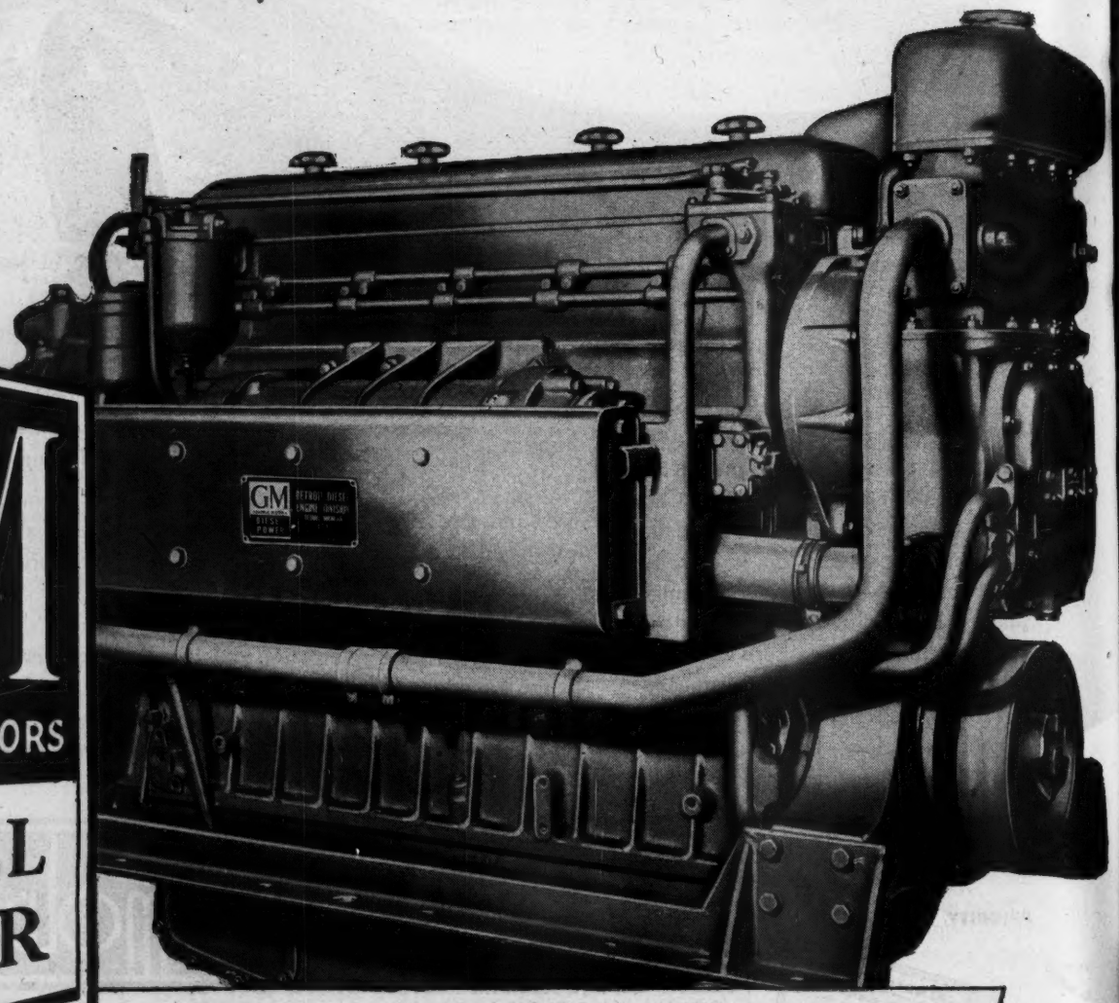


LCI—powered with 2 Quads (8 General Motors 71 Marine Diesels).



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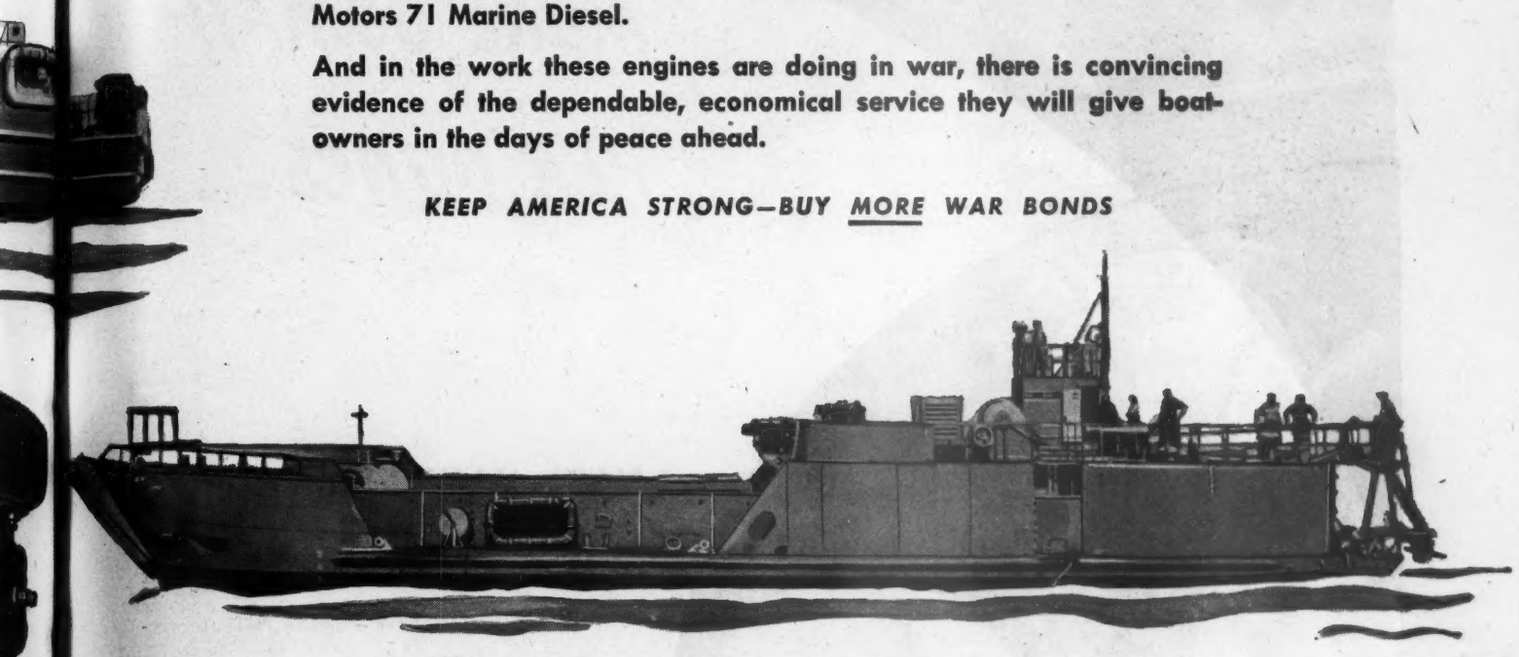
And in the work these engines are doing in war, there is convincing evidence of the dependable, economical service they will give boat-owners in the days of peace ahead.

KEEP AMERICA STRONG—BUY MORE WAR BONDS



***LCT*—powered with 3 General Motors 71 Marine Diesels.**

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The Army-Navy "E" for efficiency in war production flies proudly over the GM Diesel plant in Detroit.

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ALCOA ALUMINUM has long been a favorite with outboard engine builders. It helps them squeeze more horsepower out of smaller, lighter engines. Greater reliability is assured. Couple aluminum's natural lightness with its superior heat conducting property and you have the reasons why. Of course you appreciate the dressed-up appearance that aluminum gives your outboard. And its ability to stand up under exposure means that your engine will keep its good looks with a minimum of care. ALUMINUM COMPANY OF AMERICA, 1839 Gulf Building, Pittsburgh 19, Pennsylvania.

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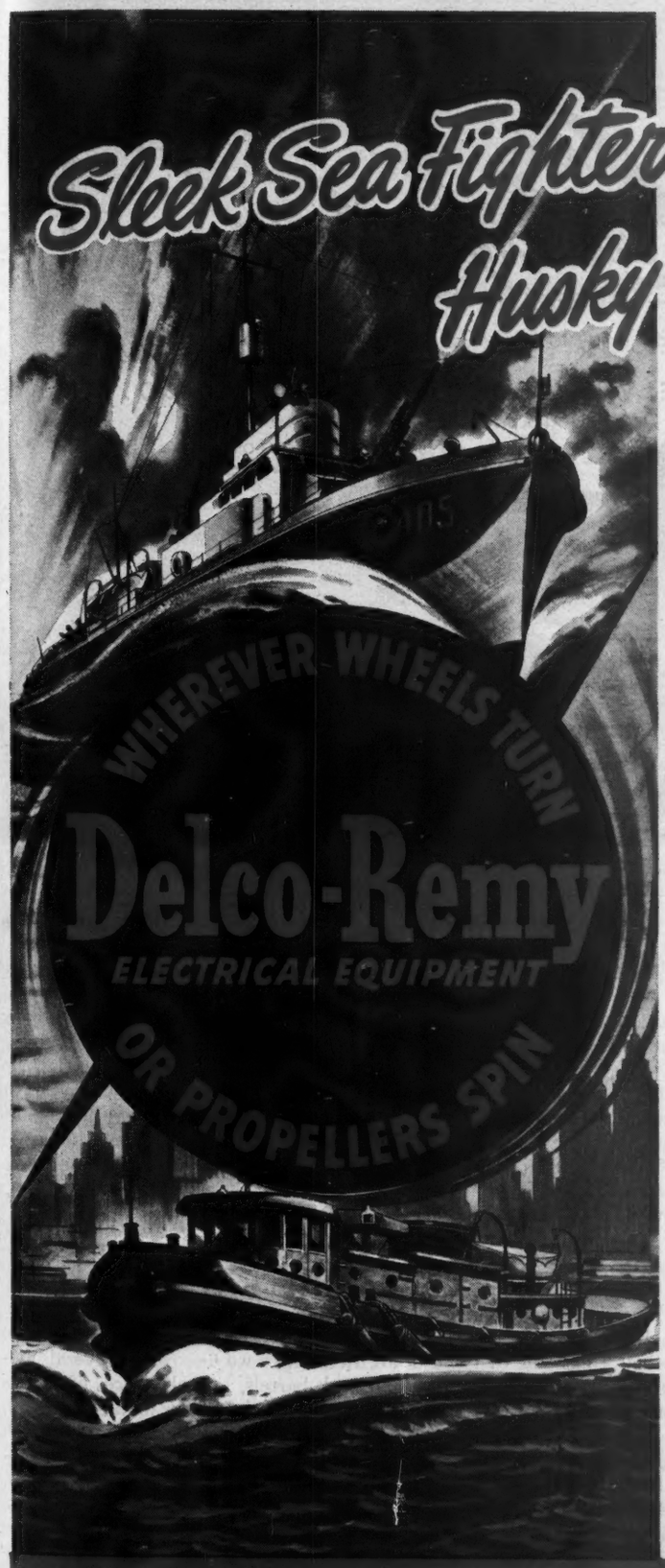

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Delco-Remy marine electrical equipment is serving our fighting forces on the seven seas . . . in swift torpedo boats and sub-chasers, in landing boats, harbor tugs, cargo carriers and practically every other type of gasoline- or Diesel-powered military craft.

This widespread use of Delco-Remy marine equipment substantiates the good judgment of private boat owners, who for many years have put their trust in Delco-Remy electrical units. Many improvements and refinements that were developed in the service of yachtsmen have been incorporated in Delco-Remy marine equipment for military applications. And by the same token, the experience gained in Delco-Remy's wartime assignments will be applied to good advantage in Delco-Remy electrical equipment for pleasure craft of the future.

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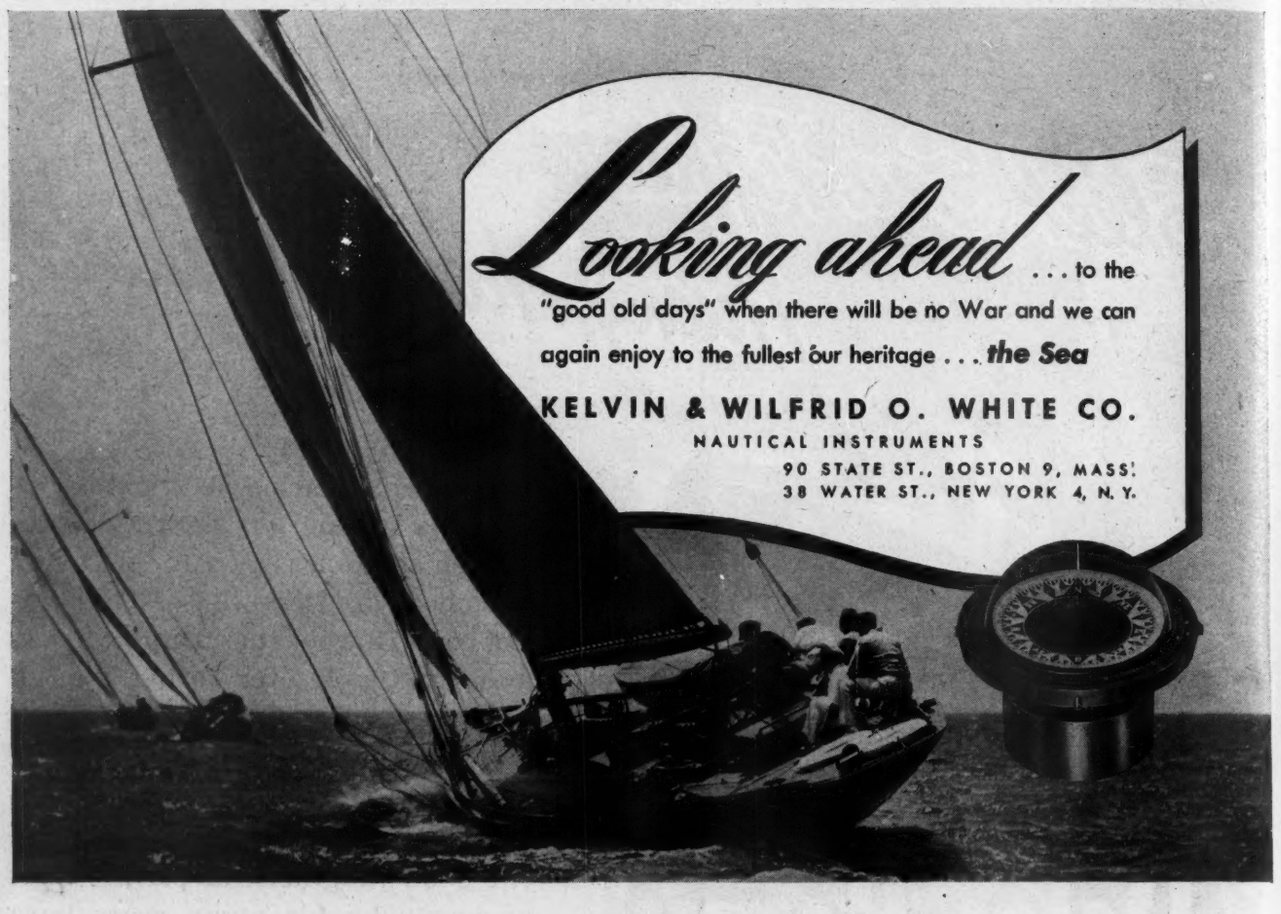
AUTOMOTIVE, AIRCRAFT, TRACTOR AND MARINE ELECTRICAL EQUIPMENT


Looking ahead . . . to the
"good old days" when there will be no War and we can
again enjoy to the fullest our heritage . . . the Sea
KELVIN & WILFRID O. WHITE CO.
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(Continued from page 132)

"spliced the main brace" as we rounded Cape Flattery and sailed briskly down the channel close by the shore of Washington's famed Olympic Peninsula.

For many sailors, there is nothing more inspiring than to see cliffs and heavily wooded slopes dropping right off into the water and forming peaceful, mirror-like coves and harbors with water deep enough to tie up to trees on the bank. Cape Flattery was an introduction to this country, windswept and barren along the shore but heavily wooded with fine fir timber on the slopes above. The Vancouver side was obscured by haze, as is often the case, and we suspected a forest fire somewhere deep in the primitive timber that covers that island. The following night, when we were far up the Straits and were powering into an anchorage just at dusk, we could see a sullen red glow high in those Vancouver hills, a flickering, twisting trail of fire.

From Cape Flattery it was only a short run into Neah Bay, the first haven inside the Straits, and here we dropped anchor and enjoyed the first uninterrupted night of sleep any of us had had since the beginning of the voyage. Everyone slept late the next morning and some of the crew went ashore to the store at the Indian village to pick up a few fresh supplies. We had slept through the flood tide, which runs fast in this Strait, and consequently had to buck a stiff ebb and sail to windward in a light breeze. The combination proved too much for *Renegade* in those limited waters and the following night found us anchored a few miles beyond Neah Bay.

Sailing at night was prohibited in this area, so late in the afternoon we would pick one of the many convenient coves and drop the hook for a good night's sleep. The last of these anchorages was Discovery Bay and we lay just off the old quarantine station where sailing ships used to stop. It was nearby that Captain George Vancouver made his first anchorage on his famous voyage to Puget Sound. Puget Sound, the Straits, and the Gulf of Georgia in British Columbia, all offer a cruising paradise with innumerable small coves and wooded islands and ideal anchorages. Many yachtsmen take vacation trips ranging from a week to several months, traveling as far as Alaska through the Inland Passage.

The last day's sail proved to be a superb climax of the entire voyage. A strong southeasterly wind came up and we boiled along Admiralty Inlet and into Puget Sound. Along towards six in the evening, with an autumn sunset coloring the entire sky, we lowered sail and powered through the locks and up the ship canal to Lake Union in the heart of Seattle. There we tied up at the Seattle Yacht Club and all hands went ashore for a celebration dinner. It had been as fine a cruise as could be hoped for and, quite fittingly, the first toast of the evening was to the Goddess of Wind for sending us such excellent weather.

THE VOYAGE OF THE "DOLPHIN"

(Continued from page 65)

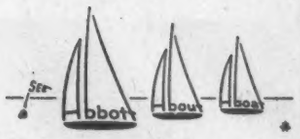
westward and made a landing. Crossing a reef, we came to the extreme east end of an islet, where we discovered several hundred staves of beef and pork barrels, and old pieces of canvas and cloth. Advancing a little further inland we found a skeleton, lightly covered with sand, and a box containing a few Spanish dollars. The natives who had been following our party disappeared and were seen at a distance skulking through the bushes, armed with spears and stones, and holding animated discussions. There was no doubt in our minds that this was the place where the mutineers and others of the *Globe's* crew had landed and made their camp. We supposed that the mutineers were still among the natives and might arouse them to take arms against us. Our landing party was not large and our position would become critical if we were attacked, so we returned to the ship.

"Early next morning I observed 40 large canoes approaching an island some distance from us. These canoes came from different islands in the atoll ring, and landed about 800 natives who were evidently preparing for hostilities.

"The island was small and a few huts could be seen standing among a scanty grove of coconut trees. We suspected that the

Donald B. Abbott

Announces for 1945.



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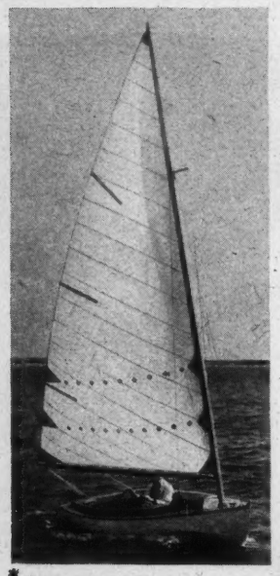
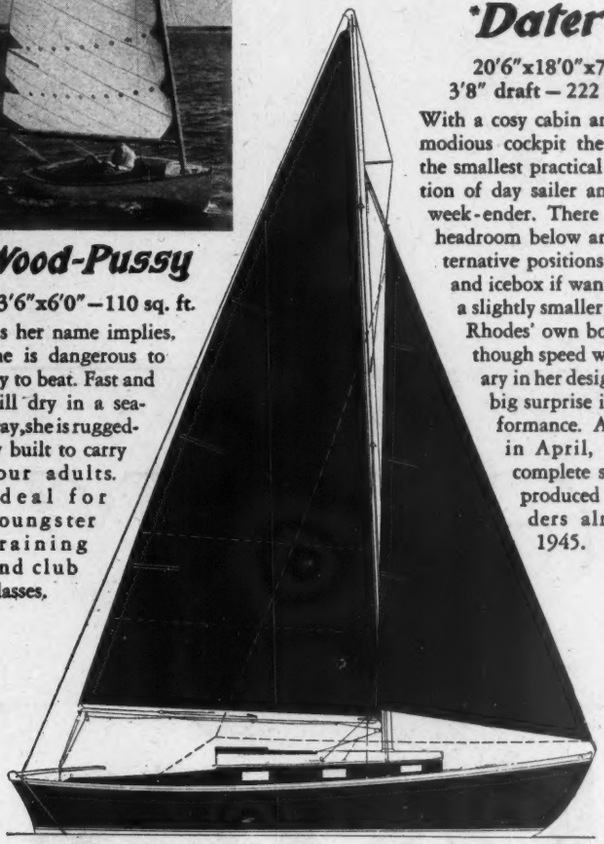


*Wood-Pussy

13'6"x6'0"—110 sq. ft.

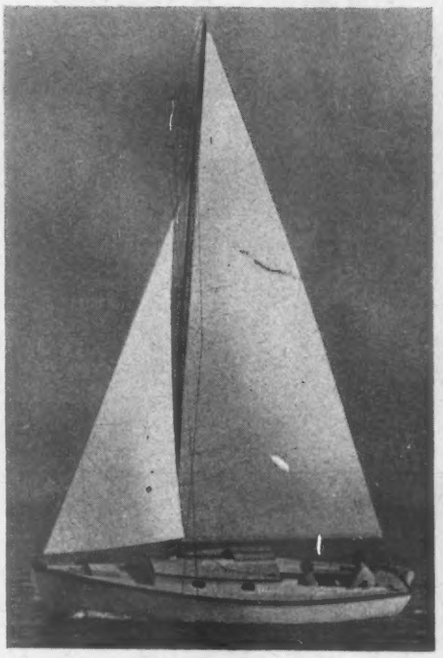
As her name implies, she is dangerous to try to beat. Fast and still dry in a seaway, she is ruggedly built to carry four adults. Ideal for youngster training and club classes.

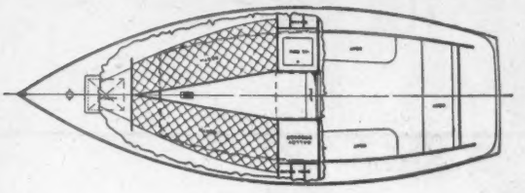


*Dater →

20'6"x18'0"x7'6"
3'8" draft—222 sq. ft.

With a cosy cabin and a commodious cockpit the Dater is the smallest practical combination of day sailer and 2-bunk week-ender. There is sitting headroom below and two alternative positions for toilet and icebox if wanted. She is a slightly smaller edition of Rhodes' own boat and although speed was secondary in her design, it is the big surprise in her performance. Announced in April, 1944 her complete success has produced many orders already for 1945.





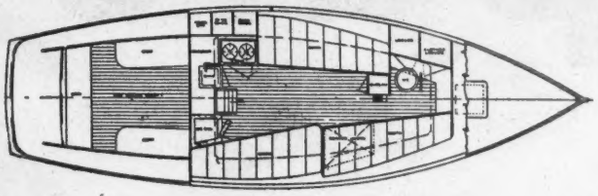
← *Caller

27'6"x22'6"x8'6"x4'6" draft—365 sq. ft.

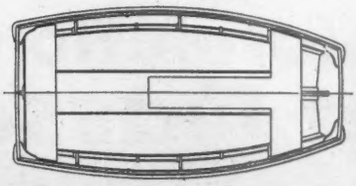
This is the first announcement of the Caller—an enlarged Dater and a real cruising boat for three with stooping headroom below, built-in toilet and complete galley standard; and inboard engine as an extra when obtainable. In addition to the wide spaciousness of the cabin, there is a big forepeak accessible from the deck for the stowage of dunnage.

The cockpit is watertight and self-bailing and the sitting arrangement provides the helmsman with his own position on either tack and all other live weight amidships, assuring proper trim.

Here is a real summer home for three.



*Coracle



At high speed the Coracle planes and will not fill over the stern as her entire transom remains out of water.

The fore-'n-aft midship thwart permits the oarsman to correct faulty trim by a slight shift of his weight.

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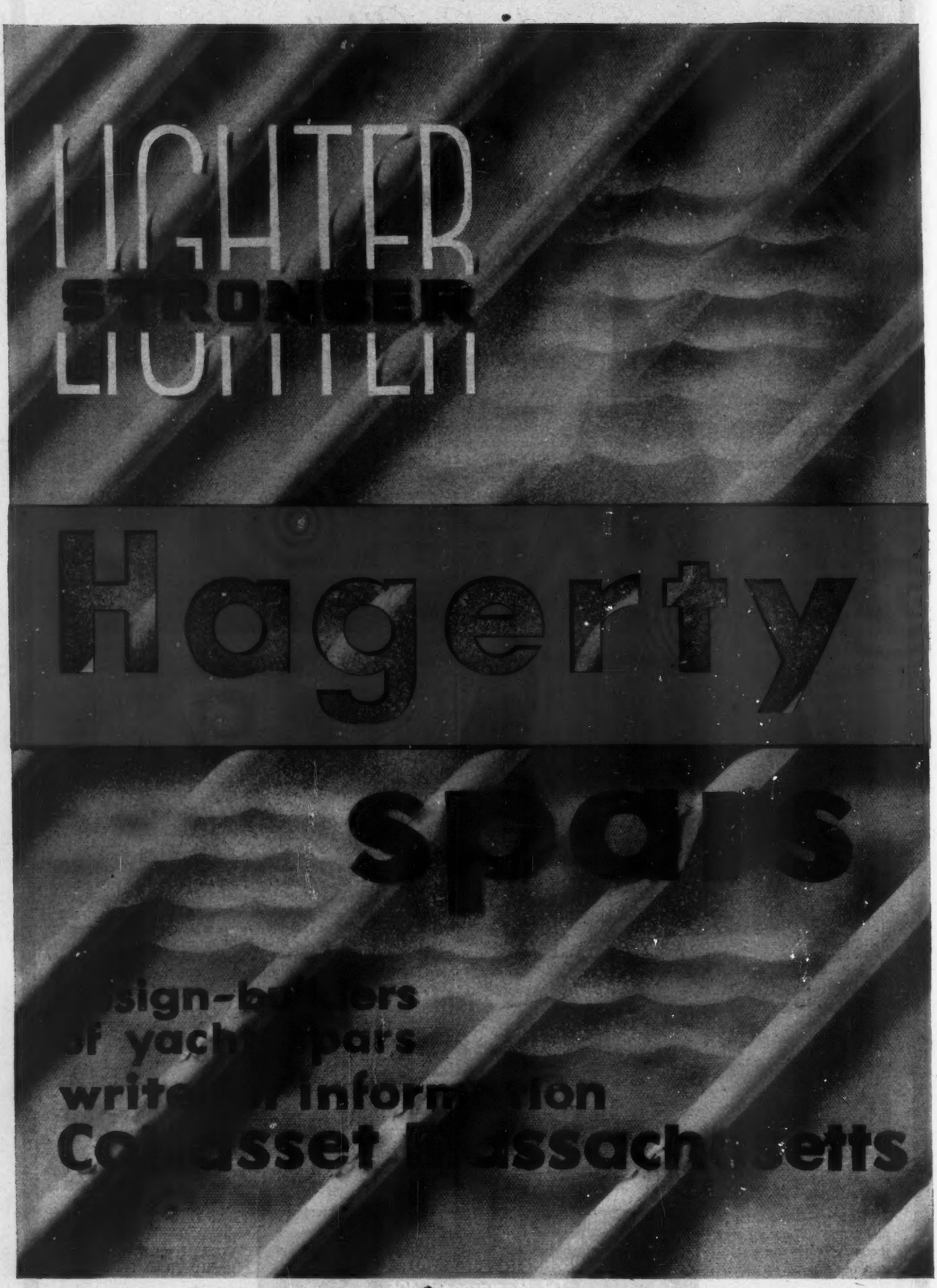
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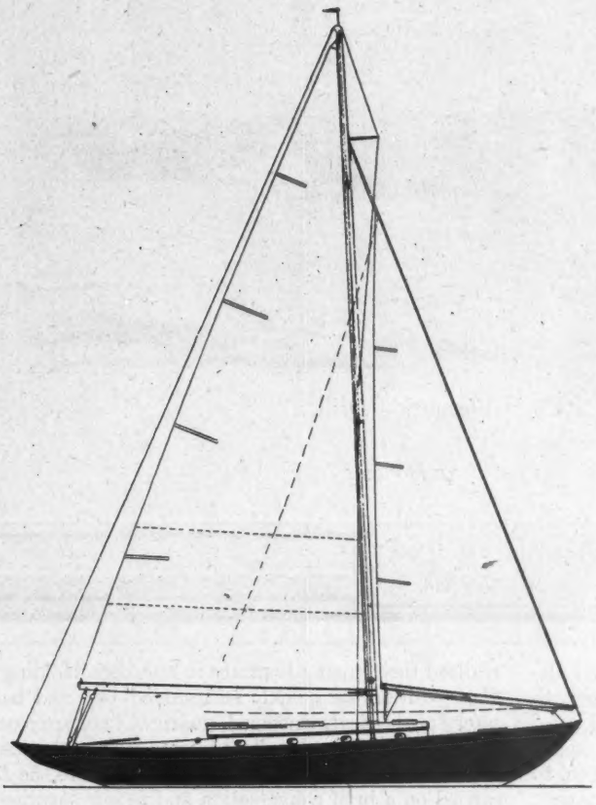
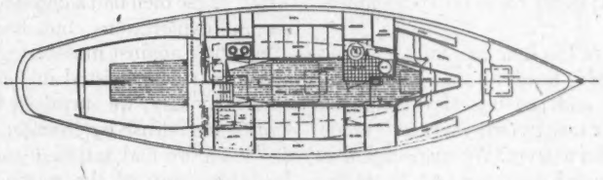
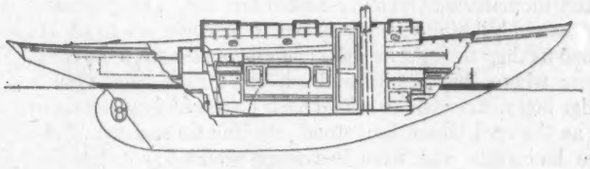
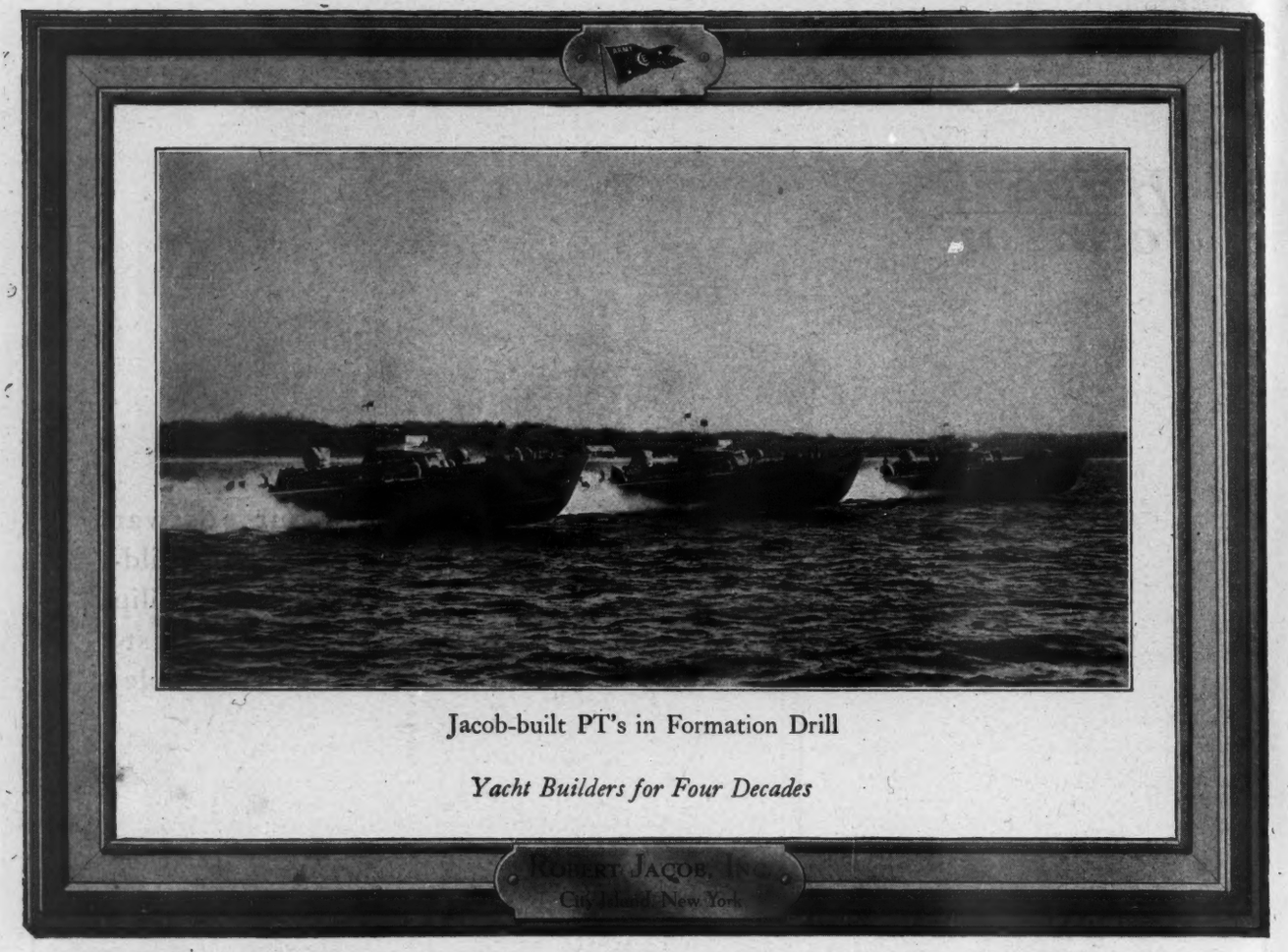


This is one of our postwar models which we will be building for you. Designed by Philip L. Rhodes, she will be fast, seaworthy and comfortable.





Hubert S. Johnson
Boat Manufacturer
BAY HEAD, NEW JERSEY



Jacob-built PT's in Formation Drill

Yacht Builders for Four Decades

ROBERT JACOB, INC.
City Island, New York

Globe's crew might be hiding in these crude buildings. I determined to land and search the huts before I measured strength with the natives. There was a heavy surf on the shore and, after we had gotten our landing craft into position, I dropped an anchor and was in the act of veering-to through the surf when, to my astonishment, a person dressed and looking like a native, addressed us in our own language. He was standing upon the beach 30 or 40 yards distant and half-way between us and the natives, all of whom had seated themselves. He spoke several sentences in an island dialect which we did not understand and then unexpectedly we were startled to hear him say quickly: 'The Indians are going to kill you; don't come on shore unless you are prepared to fight.'

"We looked carefully at the man. His hair was long, combed up and tied in a knot on the top of his head; around his loins he wore a large mat, finely wrought, and the use of coconut oil and the action of a tropical sun for nearly two years had made his skin almost as dark as that of the natives. We suspected this man to be one of the mutineers and I demanded to know his name. He answered that he was William Lay, one of the crew of the *Globe*. I consulted the descriptive crew list prepared for us by Consul Hogan and determined that Lay was not one of the mutineers. His stature and juvenile appearance answered the description we had of him. I told him to run to the boat, but he said that the natives, who had directed him not to advance any nearer, would kill him with stones before he could get to us. He informed us they thought he was arranging a plan for us to come on shore where they would ambush us. I gave each man a cartridge box with orders to reload their pistols and wade ashore as far as the spot where Lay stood. By this time, some of the natives had risen and were becoming violent in their conversation and gestures. Two or three of them advanced towards us; I pointed my pistol at them and shouted at Lay to tell them that if any of them threw a stone we should shoot the entire company.

"The natives did not seem to thoroughly understand what might happen and stood still. I knew I must hurry before they realized their great advantage in numbers. Holding our arms in alert position we quickly surrounded Lay and backed to the safety of the boat. One aged, unarmed man approached us, and Lay persuaded me to allow him to talk with this old native. While we were getting under way to return to the *Dolphin* they carried on a brief conversation and to our surprise the natives quickly and quietly dispersed after the old man returned among them.

"Our rescued American whaleman told us that only he and a shipmate, Cyrus Hussey, had survived the tragedy of the *Globe*. We learned that Hussey was with a tribe on another islet in the atoll. These men had sighted our first arrival and had followed us in our explorations, but had had to dissuade their captors constantly against massacring our crew. Lay had lived with the old man who persisted in following him through the surf. Directed by Lay, we surprised the tribe holding Hussey and obtained his release by threatening to kill the chief.

"After we had satisfied ourselves that the natives were not harboring any of the mutineers, we made patient efforts to establish a friendly relationship with them. We were successful in this due to the fact that Lay and Hussey had won their confidence during the months they had lived on the islands.

"The captain, taking Lay and Hussey with him, went on shore to meet their chiefs. He told them that white men would never come there to hurt them and that they must always be friendly whenever ships should hereafter visit their island; that, if other white men should ever be similarly situated to those they had killed, they must take care of them. They promised faithfully to do all that they were told and regretted having killed our countrymen. Lt. Percival gave them a pair of pigs, male and female, as a token of friendship. We made some further scientific explorations and, on December 9th, took our departure from Mulgrave Atoll.

"During the passage Hussey and Lay gave our commander important testimony from which were deduced full details of the unfortunate voyage of the *Globe*."

(To be continued)

Homeward Bound
... with an extra day's catch

AFTER several days at sea, this trawler is headed back to port.

The fishermen are tired—their fingers knotty from laying and hauling nets and trawls. They want to get home quickly—with as little effort as possible.

For years these men have had to steer by hand, wrestle with the wheel in rough seas. Now, finger-tip steering, even in the toughest weather, is a welcomed addition for a trawler's weary crew.

A trawler skipper recently wrote that with his Sperry Steering System, turning the wheel from hard right to hard left—a task formerly requiring minutes by hand—is done electrically in 11 seconds. Due to this improved maneuverability with the Sperry Steering System, the time saved in setting and picking up nets is equivalent to an extra day's fishing in the course of a week!

Finger-tip steering is furnished by the Sperry Electro-Mechanical System—providing virtually effortless power steering, yet permitting instant shift-over to manual steering in case of power failure—or by a simple controller type for power steering only.

At present, most Sperry Steering Systems are going into ships headed for war duty. That's why there sometimes is delay in filling commercial orders.

The Sperry Electro-Mechanical Steering System is economical, rugged, and dependable. In the case of 32 installations where careful records were kept, maintenance costs for this equipment averaged only eight dollars per year.

Sperry Gyroscope Company
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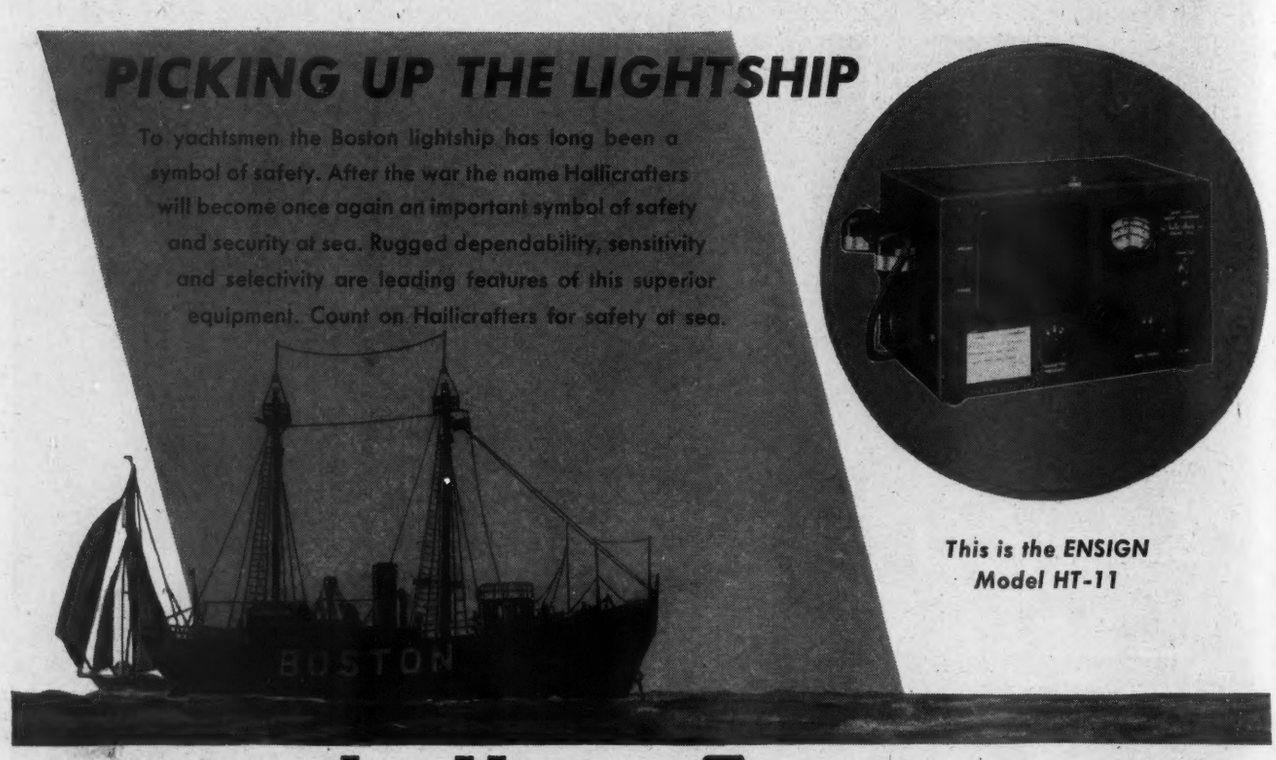
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THE HALLICRAFTERS COMPANY, MANUFACTURERS OF RADIO AND ELECTRONIC EQUIPMENT, CHICAGO 16, U.S.A.

IN THE PATH OF THE HURRICANE

(Continued from page 79)

little while. At some time during the previous day, when the raft had been turned over so many times, the water breaker was carried away. We had lost our flares and one of the paddles in the same manner. The container of rations, however, had not been lost but we found that they were much too dry to chew or swallow without water, accordingly they were quite useless to us.

We decided that by paddling westward we would hit shore, which we estimated to be about 20 miles away. We took turns at paddling and hanging on to the raft and kicking with our feet. But we made so little headway for the amount of energy expended that I've since concluded that it is best to conserve one's strength and resort to paddling only when land is in sight.

On the afternoon of the second day we saw two of the other rafts in the distance and slowly worked our way over to them. They, too, had lost their water breakers. We talked over the events of the night before and it was then that we first realized how many of our men had been lost. Up to that time, we had lost but one man from our raft, that one's loss being due to utter exhaustion. But the losses from the other rafts brought our total to twelve for the first day and night.

Soon we parted again, each raft trying to make the best possible speed toward shore. The day was warm but when nightfall came the drop in temperature made us all feel cold. Several got violent spells of shivering in which our teeth would chatter for ten minutes at a time. But worst of all were the stings from the Portuguese-men-of-war, a multi-tailed marine pest similar to the common jelly fish. There were many of them around the raft and every time any part of one of their jelly-like bodies came in contact with one of us, or even if we touched a part of the raft they previously had touched, it burned like strong acid. The pain from these contacts continued for hours.

Sharks were another annoyance. We could see their fins cutting through the water all about us and felt sure that they were only waiting for the next man to drop from the raft. They did not attack nor did they come too close but the thought of having them so near, especially at night when we could not see what they were up to or how close they were, was extremely disturbing.

During the second day the sun's heat was so intense that, in spite of repeated warnings, two of the men drank a considerable quantity of salt water in an effort to quench their thirst. That night they became irrational and soon after sundown dropped off the raft and were lost. That left only four of us, three in fairly good shape, and the fourth exhausted to the point where he could no longer speak. With only four left we were all able to get aboard the raft at one time, thus getting some much needed rest. The sea had now become smooth which also contributed to our meagre comfort. We rested for an hour or so until our shipmate who was so weak slipped from the raft. Three of us were able to get him back aboard twice after he had slipped off, but the third time he went overboard we were too exhausted to give him any further help as he sank before our eyes. We took turns staying awake for the remainder of the night to keep a lookout for possible flares from searching ships and also to watch the two who were resting, just in case one should start to slip overboard.

This worked well for the remainder of the night. As we were now too weak to paddle any longer we just drifted. Early the third morning we attempted to catch with our bare hands some of the small fish that were swimming close around the raft but we were unsuccessful. We tried desperately for we knew that the moisture contained in those fish would enable us to stick it out another day or so.

It was while we were trying to catch the fish that we heard the sound of the motors of approaching airplanes. This was the first ray of hope that we had had since being cast away and you can imagine our jubilation. The planes were sweeping right up the coast, flying five or six hundred feet off the water. I tied my handkerchief to the end of our paddle and waved it frantically but they had already seen our raft and zoomed right down over

★

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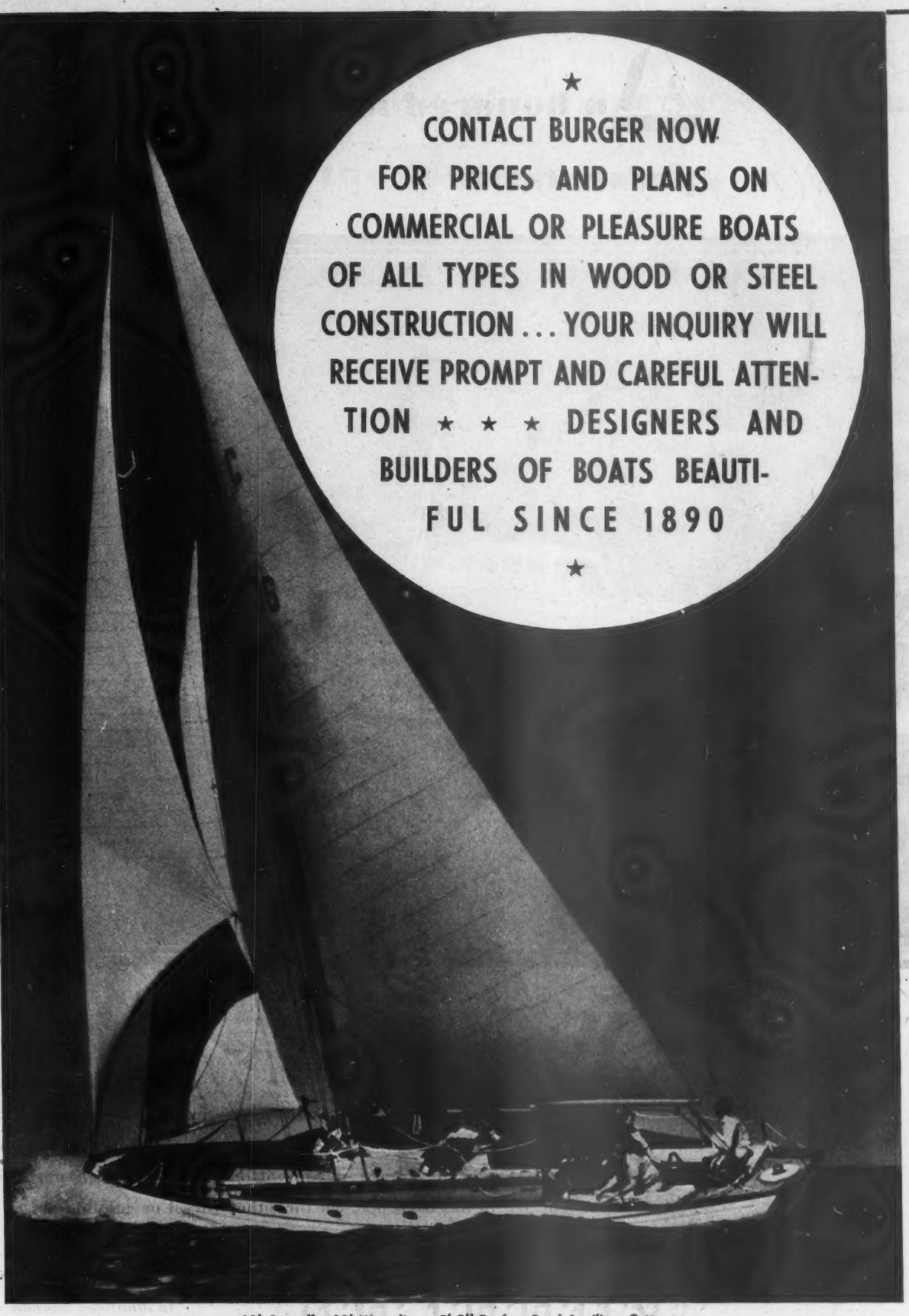

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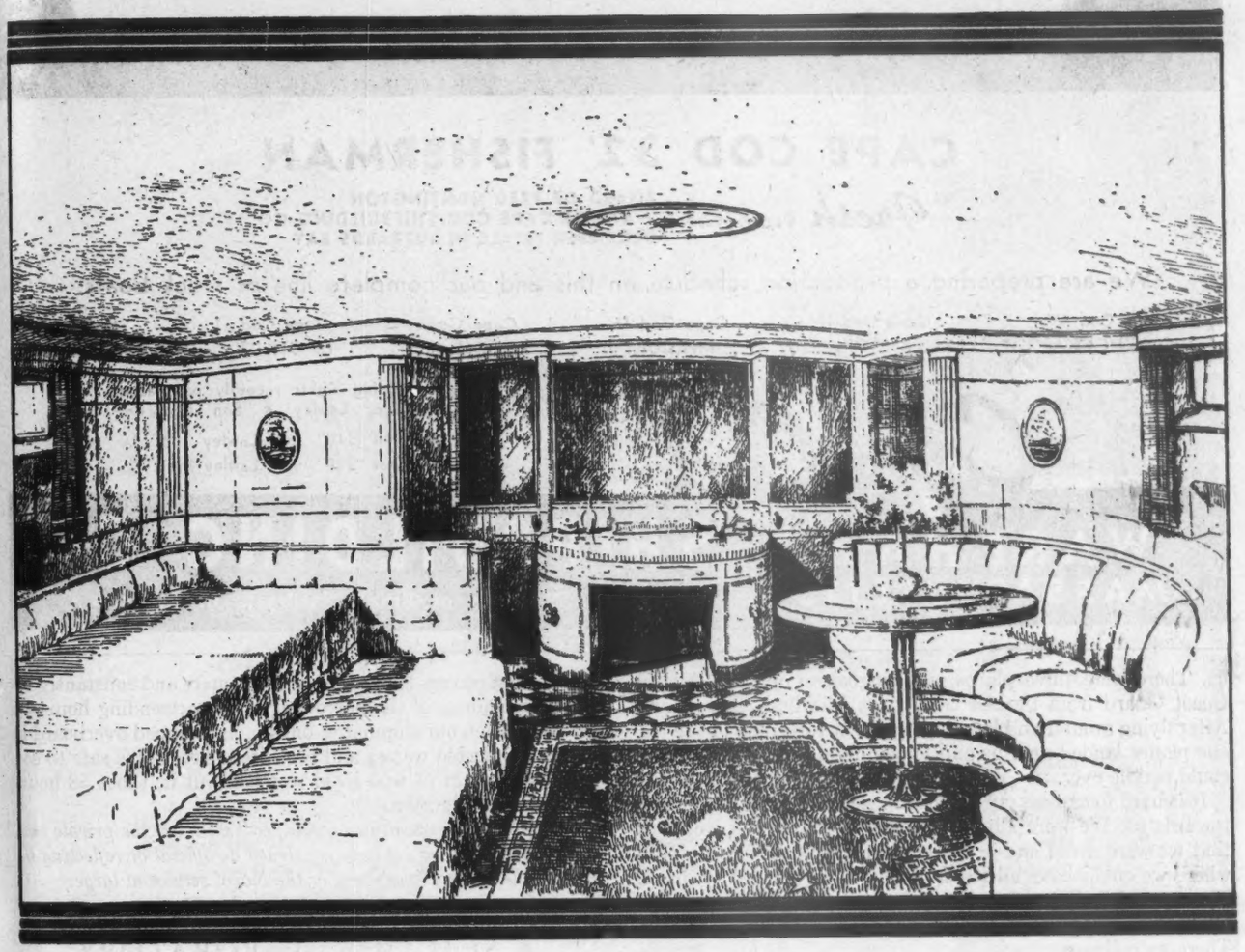
An illustrated brochure containing complete details of the Wheeler 75 is now in preparation: requests for further information are invited.

This is the owner's stateroom in the Wheeler 75



spacious as a bedroom at home

The naval architect's rendering above indicates the spaciousness and appointments of the owner's stateroom on the Wheeler 75. The owner's stateroom is the full width of the yacht, and has its own private shower-toilet room. Directly aft of the owner's stateroom is an equally spacious guest stateroom. The salon on the bridge deck provides sleeping accomodations for additional guests.

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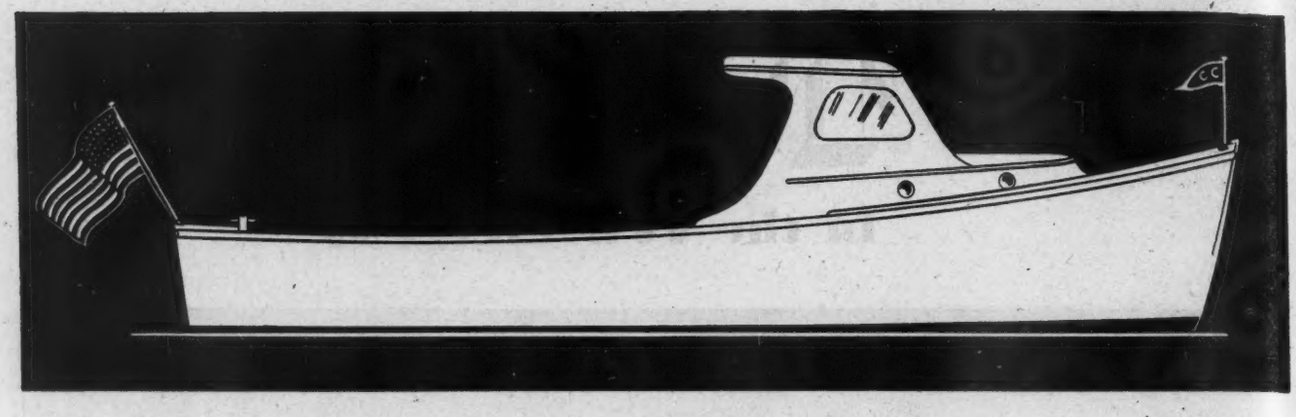

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us. There were three planes, all Kingfishers operated by the Coast Guard from the Air Station at Elizabeth City, N. C. After flying around and locating the other rafts, one of the rescue planes landed near us and taxied close enough so that we could paddle over.

It is hard to express our feelings as we saw the planes coming towards us. We were almost overcome with joy for we knew that we were saved and in a short time would be in a hospital where we could have all the fresh water we wanted to drink. That was the main thing. The pilot and the radioman on the plane helped us to clamber from the raft on to the plane's wing. There we collapsed, for we knew our worries were over. A little water and brandy were given us and we were told that the other three rafts also had been sighted and the men picked up from them.

The two-seater plane which had rescued us was too small to take off with the extra load, so the radioman flashed his base for assistance. Presently a crash boat arrived in response to his call and we were transferred to her and rushed to the Air Station at Manteo, N. C. It was then but a matter of a few minutes till we were put aboard a PBM (Martin Mariner) and flown to the Naval Hospital at Norfolk. One of the first treatments that we received at the hospital was a blood plasma transfusion and it felt to me like new life running into my weary body. I now can appreciate what a tremendous boost it must give to men wounded in battle or suffering from shock.

The 19 survivors of the *Jackson's* 40-man complement soon responded to rest and food. In ten days we were well enough to be discharged. We were all given survivor leave and once more were restored to our worried families and solicitous friends.

We now heard that the Liberty ship had dragged her anchors slowly toward the beach so that, when the storm subsided, she was but a scant mile and a half from shore. If the wind had lasted much longer she surely would have been on the beach. It was here we learned that the *Bedloe* had capsized shortly after we did and her survivors likewise were brought into the Naval Hospital at Norfolk.

All the survivors suffered from nightmare and constantly recurring memories of the harrowing and heartrending hours on the rafts, when our shipmates, one by one, slipped overboard in the shark-infested waters and sank from sight. It is safe to say that, by those of us who lived to tell about it, those 58 hours will never be forgotten.

The opinions or assertions contained herein are the private ones of the writer and are not to be construed as official or reflecting the views of the Navy Department or the Naval service at large.

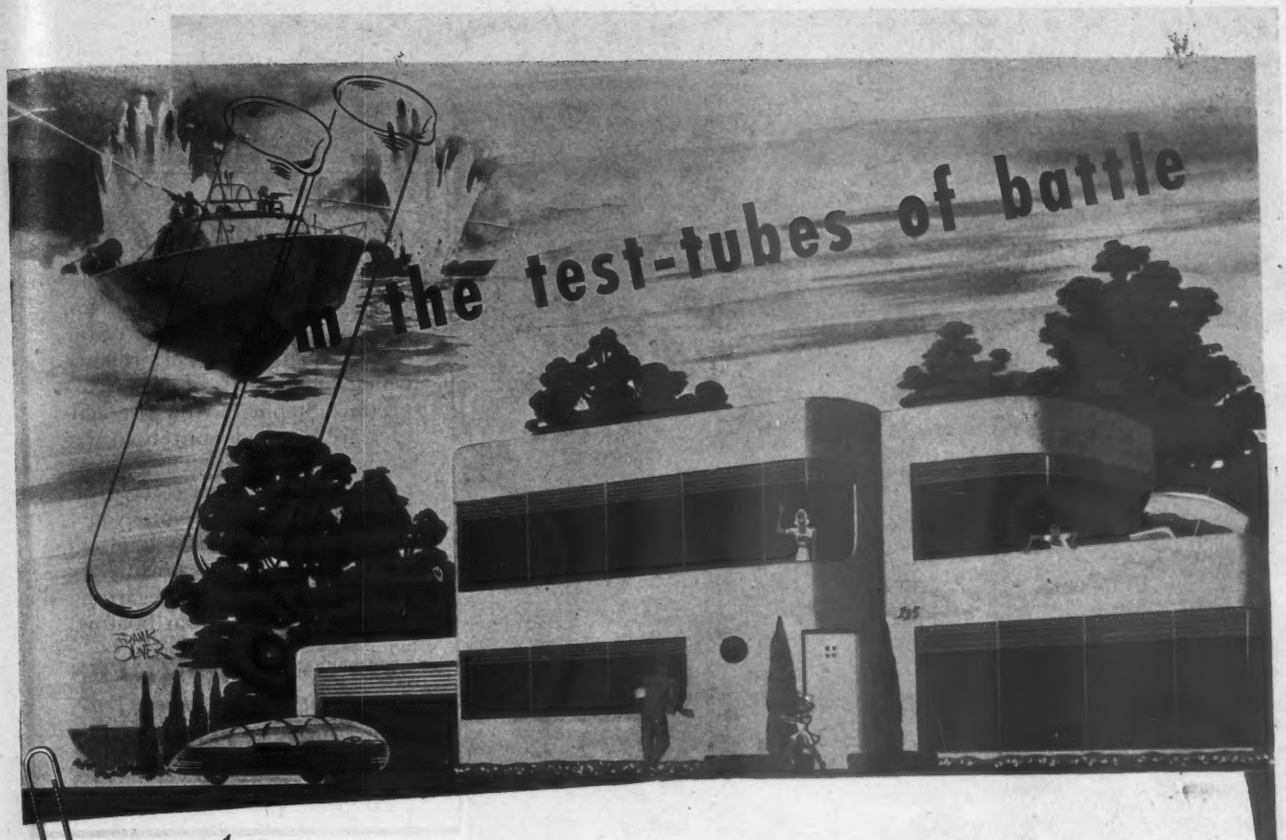
A SEAGOING LABORATORY

(Continued from page 71)

of one of the boats about two years ago and since then they've been a mighty welcome addition to most of the fleet.

Regular doghouses have been fitted to the smaller boats wherever it was possible without interfering with sheeting arrangements, in which cases we've had to resort to a somewhat more simple spray shield to protect the helmsman. The larger vessels have been a bit more fortunate with the addition of heated wheelhouses — that is, heated to some extent. All of these houses have been invaluable under the present conditions but the advisability of using them for peacetime cruising is something else again. I think it's a matter of personal preference which in turn will be influenced by how a boat is to be used. I certainly wouldn't want one for summer cruising if it interfered with the helmsman's view.

When a boat is forced to remain at sea during severe weather, adequate ventilation becomes a serious matter. With the exception of a few ocean racers, the smaller boats in the fleet were ill equipped to meet such a problem. While most cruising yachts are not designed to keep the sea for long periods, I think they all would be much better off if more thought were expended along this line. There are plenty of times during the average summer's sailing when you have to close ports and hatches with the resulting closeness and discomfort below, especially for



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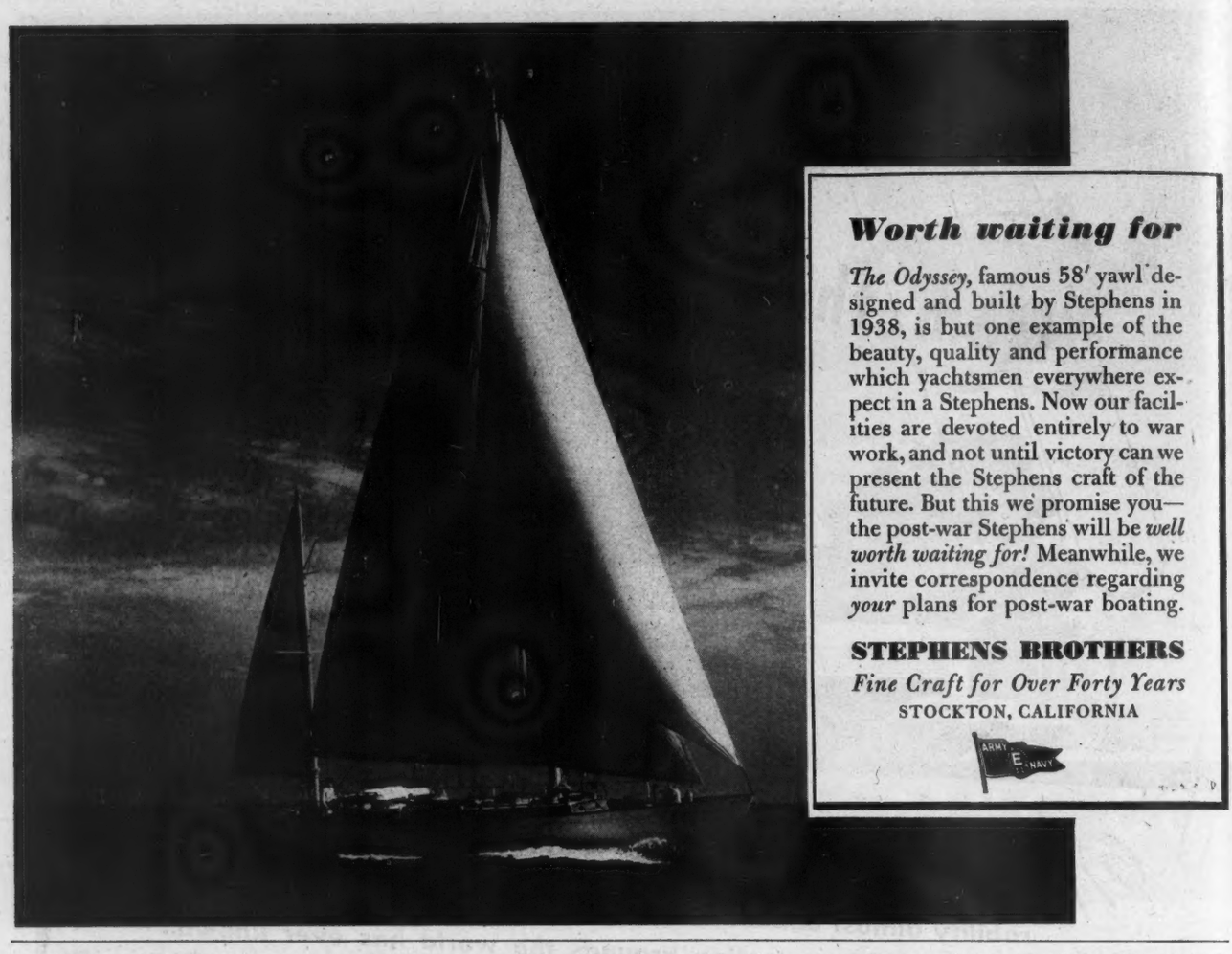

Worth waiting for

The Odyssey, famous 58′ yawl designed and built by Stephens in 1938, is but one example of the beauty, quality and performance which yachtsmen everywhere expect in a Stephens. Now our facilities are devoted entirely to war work, and not until victory can we present the Stephens craft of the future. But this we promise you—the post-war Stephens will be *well worth waiting for!* Meanwhile, we invite correspondence regarding *your* plans for post-war boating.

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Fine Craft for Over Forty Years
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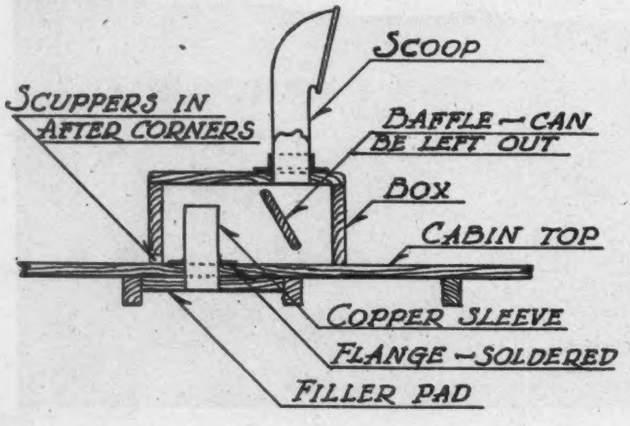
somebody who's beginning to turn a bit green around the gills. There are several ventilators on the market designed to take in air without the spray and rain. I've never used any of these and know little about how efficient they may be but we have installed *Dorade*-type intake scoops throughout the fleet by the dozen. They have certainly proved a godsend to us and I don't know how we'd have managed without them. Except under the worst conditions, they take in little water if properly installed and can always be turned to face the wind, which is essential for sail boat use. These scoops have the further advantage of being fairly simple to assemble and to install. I believe they have been illustrated a good many times in yachting magazines. Occasionally, they have been swept off the deck by seas, along with other deck gear and they have been torn off by jib or staysail sheets at times, so they should be pretty stout and well secured.

In addition to intakes, it isn't a bad idea to include two or three outlet or suction vents in strategic spots, notably in the engine compartment, the head and the galley. Smoke heads can be used for this purpose because they work all the time, regardless of wind direction. The type to use, however, is of importance as some create considerably more draft than others.



A "Dorade"-type scoop

One of the most interesting and certainly the most exasperating puzzles we've had to solve was to carry away coal gas from galley ranges and cabin heaters. During the early part of the first winter's patrol a number of the fellows were knocked out by this gas. Fortunately, they all recovered but I can tell you it was a serious problem and we were worried, to say the least. We tried every type of smoke head we could get hold of with no real success. Almost anything would work when the boats were sailing on one tack but when they went over to the other it was no go. Some heads were better than others but there wasn't one that could be counted on at all times. There were two or three boats that never had much trouble and I've always believed it due to the particular location of the heads in relation to masts and sails. I don't know anyone who knows exactly where the spot should be — and, anyway, you can't always install smoke pipes just where you want them. They have to be somewhere near the stove. We finally installed two heads for each stove, one at either end of a 'thwartship pipe forming a "T" with the stove pipe itself and joining it above the deck. The heads are separated by five or six feet in most cases and can be shut off individually by dampers. The head to leeward is used and the windward one shut off. This system works and it is at least one way to prevent back draft off the sail being forced down into the stove.

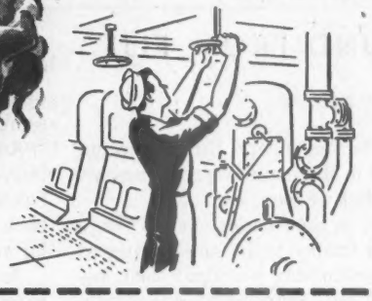
A number of good smoke heads are available. We have used and have found very satisfactory the Breidert Air-X-Hausters, Marvent, Chamberlain and New Bedford-type heads. And we've also used a number of other types which have been more or less common for generations but those named have proved the most efficient. The first two, I believe, in particular, would be suitable for the purpose of exhausting foul air from engine rooms, etc. Incidentally, all smoke heads and smoke pipes are better if made of copper or monel. If steel or iron is to be used, it should be heavy and extra well galvanized.

Breidert MARINE Air-X-Hausters

PATENT NO. 2269428

changed ventilating standards 50 years old!

"We didn't know what good ventilation was until we installed Breiderts!"

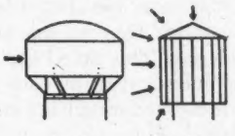


Breiderts are supplied with waterproof dampers operated by non-rising wheel and rod, providing effective temperature control for diesel engine rooms.

Positive Ventilation under *all* weather conditions!

STATIONARY, NO MOVING PARTS... The Breidert does not have to be turned into the wind for favorable results. Uses no power.

RIGID TESTS PROVE EFFICIENCY... The certified ratings of the Breidert Marine Air-X-Hauster are based on extensive wind-tunnel tests made by Smith, Emery & Co. (Pacific Coast branch of Pittsburgh Testing Laboratories), with wind blowing at all angles (see right). Most conventional ventilators are tested with wind blowing horizontally only. Compare the Breidert's ratings with others!



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SUCCEED WHERE CONVENTIONAL VENTILATORS FAIL ... Breidert Marine Air-X-Hausters have successfully solved many difficult ventilating problems, providing positive ventilation where other ventilators "back-drafted" or otherwise failed. They can be installed in horizontal or vertical position.

Marine ventilating experts, ship owners and crews are enthusiastic about the Breidert Marine Air-X-Hauster—the greatest scientific improvement in ship ventilators in over half a century. Designed on proven aerodynamic principles, the Breidert provides safe, sure ventilation no matter which way the wind blows, at sea and in port ... *without operating or maintenance expense!* "Back-drafts" are completely eliminated where no interior negative pressure exists.

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- ✓ Costs less in the long run because longest lasting

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New descriptive folder sent on request

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234 West 44th Street New York 18, N. Y.

HOMEWARD BOUND FROM FIJI

(Continued from page 76)

and those rescued turned out to be the enemy. But two round glass fish net floats, bobbing past in the foam, were the nearest approach to anything Japanese that we were sure of.

Joe and Dick had a difficult job on their hands when a three-quarter inch eyebolt, in the horn timber under the counter at the water line, to which the bumpkin stay was made fast, became crystallized and snapped off. This deprived us of the use of the permanent backstay. They had to wait for a calm day to effect repairs. Joe, in a cramped position inside the counter, punched the old bolt out; while Dick, practically hanging by his feet from the bumpkin, had a new bolt (with a string attached to draw it through the hole) already made fast to the bumpkin stay. He threaded it through with difficulty and Joe tightened up inside with washers and a nut. It was not done as easily as it sounds but made a strong job.

One day there was much excitement when, just at sunset, a big grey steamer came out of a rain squall astern. On seeing us she shifted her helm and came up on a parallel course, slowing down about a quarter of a mile to windward. I don't know what the others thought, but "raider" came into my mind. It was rather a tense moment until she broke out her colors, showing herself to be an ally. We showed ours and she went on her way.

Once more we were to be reminded that we were at war when, one night during his watch, Jasper banged back the hatch and shouted "Bombers overhead!" waking us all out of a more or less sound sleep. I waited for a bomb to drop and, when nothing happened, stuck my head out to have a look. We could hear the whining drone of a heavy plane, or planes, flying fairly low, and saw what appeared to be a red and white light flashing, but it may have been flames from an exhaust. We saw or heard several planes after that, and for a week sailed under the clipper lane, seeing the big ships go overhead, well lit and friendly looking. Some time later a single plane left its course and circled around us. We displayed our ensign and removed the galley stove pipe, which is shaped like a T with one side much longer than the other to avoid back draft from the mainsail. It strongly resembled a swivel gun.

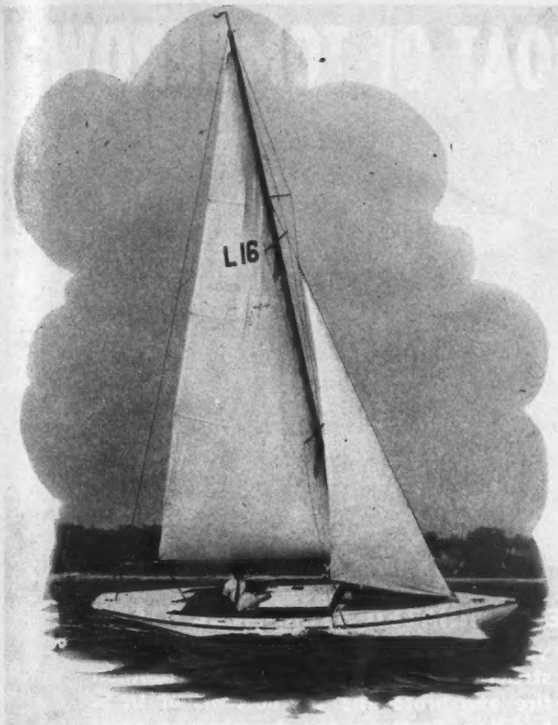
An occasional calm day was a welcome change at sea and a busy day aboard. Bedding was aired on deck, pies and cakes got baked and everyone took the opportunity to have a sea water bath. The sea and air were warm but sea baths were not as popular after crossing the thirty-seventh parallel.

As we only had our four lowers to get home with we were most careful with them, especially in the sudden squalls of the tropics. The heaviest and most frequent of these were encountered when we were east of the Hawaiian Islands. Canvas was unprocurable both in Papeete and Suva. Our sails were eight years old but had had reasonable care. Joe always took them off in port and stowed them below dry. One reef was usually turned in the main before dark each day. This saved the watch below from being called up unless things got really bad. The mainsail and jib are of 12-oz. army duck, the foresail and staysail No. 8 ship canvas. They came in last.

Taking in sail at night in heavy weather was no joke. The jib was particularly difficult as the man on the foot ropes was often submerged to the waist, and had a job not only to stow the sail but to hold on. Chafing was something that had to be continually watched for. The shrouds were wrapped with sennit wherever the sails touched them when squared off.

The weather became colder daily as we made northing. Something new was added to our costumes every day until there was no more to add. We turned in "all standing," just removing our shoes when the weather got really cold. This saved time when a call to shorten sail disturbed the slumbers of the watch below, and it prevented a repetition of the time when Joe rushed up on deck with his trousers on stern first. Sometimes there would be a squall to break the monotony. If so, it was usually timed nicely to arrive the moment supper was ready to serve.

"On deck, squall coming down!" shouts Joe. Dick leaves his pots and pans, and he and Jasper are on deck, easing sheets and



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lowering away on the main if the squall is a bad one. The boat is pressed down, her lee rail awash. Then she is run off the wind to ease her. Lightning flickers in the black clouds overhead and a sudden shower of stinging rain floods the decks, the scuppers spouting water as she rolls. The squall tears away to leeward, and we come back on our course and continue our supper. Dick puts a forkful in his mouth, looks as if he were poisoned, lifts a stove lid and deposits his mouthful in the fire.

"What's the matter?" is the general query. "Cockroach," grunts Dick. We all look intently at our plates.

Some nights the weather called for two on deck all night and there was no sleep for anyone. That is why we were always trying to catch up on sleep during fine weather. When we entered the steamer lanes, an extra sharp lookout was kept at night. We carried no lights, our cabin ports were painted black and so was the binnacle glass, only a little space being left clear to show the lubber line. A small light over the chart and galley tables was all we used at sea. I think we had more fear of being run down by a convoy some dark night than of meeting the Japs. We often wondered about the war news. The war and the world seemed so far away from our own little world aboard.

I quote from entries in the log as we neared the land: Nov. 16th: Overcast with heavy sea at 0800. Bar. 29.85. wind SE. c.c. N 15° E. Sighted plane overhead at 0900; no sight at noon. Bar. 29.80. Gulls appear. Gooneys have left us. 1600, blimp circled around us. We showed our ensign. Wind dropped. 1800, big swell from S. Take in all sail. Rolling heavily. Some fog. Keep a sharp lookout. Expect to sight land soon. Nov. 17th; Sky clear at daybreak. Observed Mars to the west. Quickly overcast again. 0600, blimp overhead again. Several planes later. 0800, Bar. 29.80. 1045 Wind E. Get sail on her. Get noon sight which we badly need to get a fix. Puts us in Lat. 45° 56′ 36″ N. Long. 124° 24′ 30″ W. Fog thick towards E. Clears up. At 1345 Dick sights land, Tillamook Head, bearing true E about 20 miles distant. Change course to N 38° W. Bar. 29.86. Fog shuts down. Clears later. We sight two ships, an inward and an outward bounder. Fresh E wind.

We made Tillamook Head our landfall so as to be windward of Juan de Fuca Strait as the prevailing winds at this time of year are SE and SW and Joe was not sure of the chronometer rate, not having had a check for 57 days since leaving Taiohai, for we had no radio aboard. The chronometer is a Waltham 23 jewel, 16 size Vanguard movement railroad watch. It has kept an even sea rate of three seconds gain per day.

Nov. 18th: We had Cape Elizabeth abeam, distance 35 miles. Compass course N 38° W. A dull overcast day. Cape Flattery abeam at 6:00 p.m., about 35 miles distant. Hove to on port tack for the night as not sure of coast lights and fog shutting down.

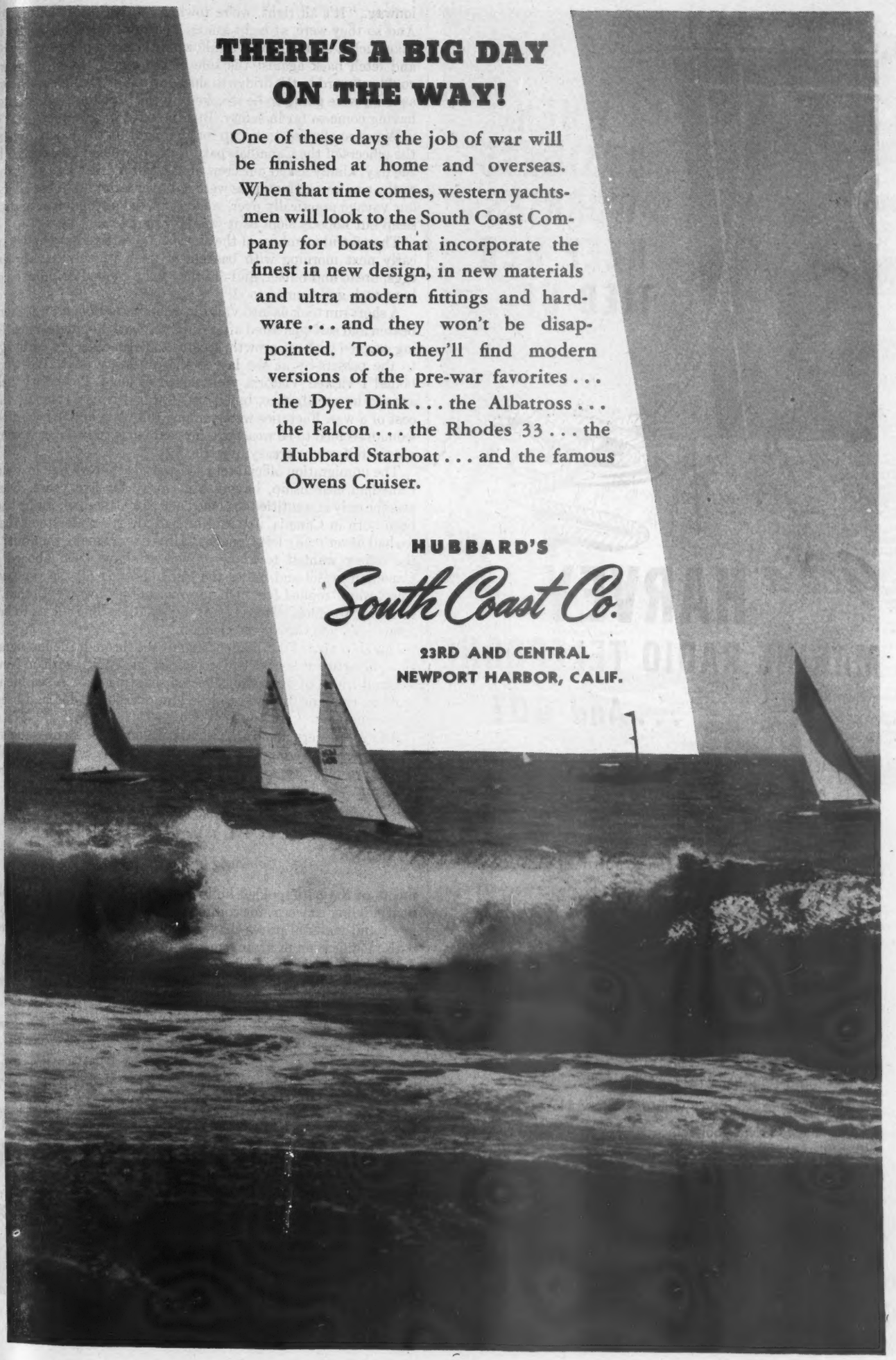
On the morning of the 19th, we were off the entrance to Juan de Fuca Strait, with Vancouver Island on our port hand. A cold wind dead ahead, we tacked and tacked all day and made poor time. Nightfall found us still at it, with miserable weather, rain and sleet. We began to think of sunny Tahiti. Seeing several vessels with running lights and the lighthouses blinking away as usual, we thought the war must be over and switched on our lights for the first time in many months.

Early the next morning, the 20th and Jasper's birthday, a U. S. patrol came up and spoke to us. When they heard of our tobacco shortage, packets of cigarettes rained on deck and Jasper and Dick enjoyed their first smoke in weeks.

The wind fell light and still ahead, so Dick got his engine going for the first time since leaving Taiohai two months ago. Much of the original oil in the 100-gallon tank which left B. C. with us five years ago was still on board.

A Canadian patrol spoke to us and promised to report us. A general clean up took place aboard *Lorna D.* I cut Joe's hair and we used fresh water lavishly — no need to be careful with it now. Jasper and Dick decided to keep their luxuriant whiskers. They found them warm and it saved wearing a tie in port.

About 9:00 p.m., we rounded Race Rocks Light, where the examination ship met us. We made fast to her with light lines, while the officials came aboard to inspect our papers. Noticing the schooner was under way again, Joe started for the compan-



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ionway. "It's all right, we're towing you in," said the officer. And so they were, at eight knots. The stern line, not meant to take such a strain, snapped, allowing the schooner to sheer off and fetch back against the side of the bigger vessel until we could get word to the bridge to slow down. For a while, it seemed as if we were going to be wrecked by the Canadian Navy after having come so far in safety. But the offer was well meant.

We were allowed to tie up for the night at the wharf, where the officers of the Canadian patrol, whom we had met earlier in the day, kindly asked our crew aboard for a drink and to listen to the war news. Hostilities were not over, after all. That night, our voyage practically over, we anticipated a wonderful night's sleep but nobody slept as it was far too quiet.

Thoughtful members of the station staff arrived at the wharf early next morning with baskets of fresh vegetables, apples, eggs, bread and butter, and did they taste good after months of hard tack and canned food!

A short run took us into Victoria where the schooner, weather-beaten and salt encrusted after 61 days at sea, her metal sheathing covered with sea growth, seemed to be an object of curiosity to the passers-by as she lay at the causeway float. We were home! I viewed Victoria with mixed feelings. Prosperity had arrived in our absence, but it was too bad it had come at the cost of a war. Factories were running full blast and every other woman seemed to be wearing a fur coat; that is, those that were not in uniform or greasy overalls.

The immigration official told Joe and me that we had lost our Canadian citizenship, having been away for five years. Dick was the only one entitled to come back as a Canadian, for he had been born in Canada. Joe said he had always understood that we had never really left Canada. "How do you make that out?" the officer wanted to know. "Well we have been aboard a Canadian vessel and under the Canadian flag all the time we were away," replied Joe. "Oh no, you can't get away with that," laughed the official. However, it did not take long for us to become bona fide Canadians again.

Our ship's cat, Fiji, did not have to get through the immigration department as he had remained in Tahiti with a New Zealand friend of ours who collected seagoing cats. A sea life is hard on cats and I feared to lose him overboard. He had been great company.

And so we were home at last, after some six years of wandering. Perhaps we brought a breath of the South Seas back with us, for we returned to the mildest winter in years and picked roses and violets on Christmas day.

A MOLDED PLYWOOD CRUISER

(Continued from page 85)

ments of the bare molded hulls and plans to certain reputable boatbuilding concerns for completion in their own plants at the labor and material prices that prevail in their community, and with modification of arrangements, etc., to suit local needs.

Photographs of the *Little Gulfer* in action, and results of her early trials will be presented to YACHTING readers as soon as they are available.

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If you would like plans and specifications for the 20-foot Marconi rigged centerboard sloop illustrated above, write for boat plan 21. There is no charge or obligation.

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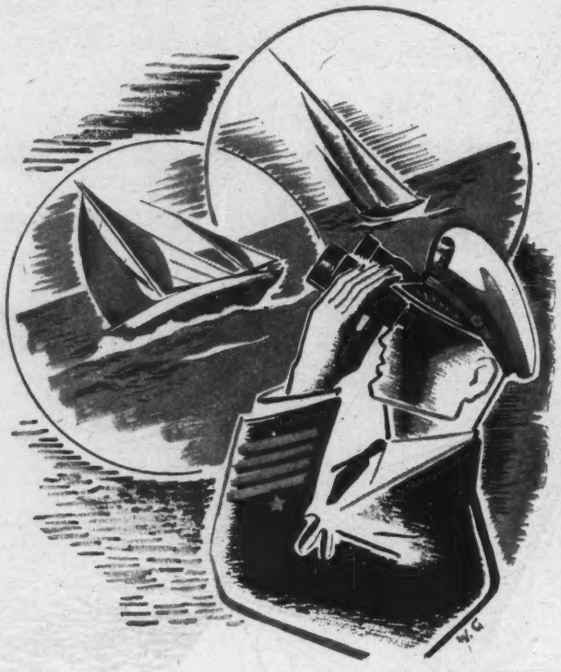

LOOKING AHEAD? Yes — but we are still concentrating on equipping men who "deliver the goods". We will continue to do so until Victory is achieved. . . . When peaceful pursuits and pleasures again become the order of the day, you, who like to sail the seas, will find us prepared to add to your enjoyment by supplying you with correct yachting uniforms and insignia as well as new types of seagoing togs developed from the experiences of World War II. These will be available in the Appel tradition of QUALITY, SERVICE AND CORRECTNESS *. . . our watchwords for almost 90 years.*

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OUTFITTERS TO SEAFARING MEN SINCE 1856

SOME CONSIDERATIONS OF THE PROPELLER PROBLEM

(Continued from page 73)

the builders tried this change which I had prophesied would give the ship about the same speed with less efficient wheels. The result was that the vessel made about 1¼ knot more speed without the reduction gear. Not only did she then have good maneuvering and backing qualities but better speed — all without scientific sanction.

It is essential to relate the hull form and the wheel to attain increased speed. In a slow turning wheel of large diameter, friction contributes to a considerable power loss, which, with other disadvantages, more than offsets the actual efficiency loss of the smaller propeller turning at higher revolutions.

In auxiliary sailing vessels, the two blade solid wheel in an aperture is still desirable. The feathering wheel has not proven entirely satisfactory, as it does not always function properly. After continued use, it shows considerable wear, which results in rattle and vibration being transferred to the hull. But, with the new rubber and plastic bearings outside and roller bearings on the shaft from the clutch, the problem of wear is not so important where the wheels are allowed to spin. Yet, when the shaft goes to the reverse clutch of the engine, the gearing often suffers excessive wear. Therefore the clutch should be of a positive type, which disconnects so that there are no gears which must turn.

The question of steam versus diesel is still a debatable question in so far as tugs are concerned. On the diesel tugs, considerable weight reduction is possible by gearing to the propeller, and wheel speed can be made to suit the conditions. With lighter weights in the hull, the speed of the tug (when free) is increased over that of the older vessels propelled by steam. By the addition of the Kort nozzle, increased towing efficiency has been shown yet, where there is a considerable amount of driftwood, some operators do not like this device because of debris jamming between the wheel and the nozzle. One would also presume that dragging this ring through the water might mean a loss in speed, yet this is more than offset by its ability to draw the water mass through the nozzle to the wheel, and get a better thrust reaction when towing. On inland waterways the nozzle has the additional asset of being a protection to the wheel when grounding.

One of the most interesting of the recent developments in gear reduction has been the Chrysler "Sea Mule." While the original units were more or less crude and simple in design, they were extremely effective. With their light gas or diesel motors in single, double or triple units, they had a gear reduction up to 11:1. When attached to the barge unit, they not only permitted good towing by stern drive, but also good maneuvering and backing. Today's "Sea Mule" has the added advantage of being able to be raised or lowered at the after end of the barge so as to best suit the towing conditions and the water in which it is being used.

It seems to me that this idea could have been used in the development of landing barge designs, with a resulting improvement in performance. No landing barge has good backing ability, and hence can be reversed only a few feet without going completely out of control. I have seen a "Sea Mule" back a large barge for over a quarter of a mile without loss of directional steering, yet I have never seen a landing barge backing over 50 or 100 feet without turning out of control.

Wheels turning in a tunnel operate under an old set of laws that call for sealed and rounded tunnels running up to a depth of about half the wheel diameter above the waterline. In the case of twin tunnels, dividing deadwood is required so that one tunnel does not rob the other of its power. Had the landing barges a sloped stern like that of the "Sea Mule," then steering would be greatly improved, as their vertical "barn door" stern does not lend itself to good steering.

Another development in the design of the "Sea Mule" was casting special high tensile steel propellers in concrete molds. The steel wheels soon proved to be stiffer and stronger than the usual bronze propeller, and rust deterioration was soon shown

. . . and ~~never~~ the twain shall meet

"East is east and west is west," wrote the poet, "and never the twain shall meet."

But he was wrong.

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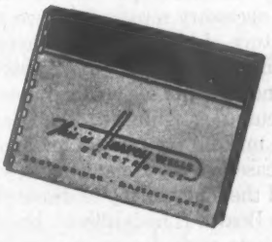

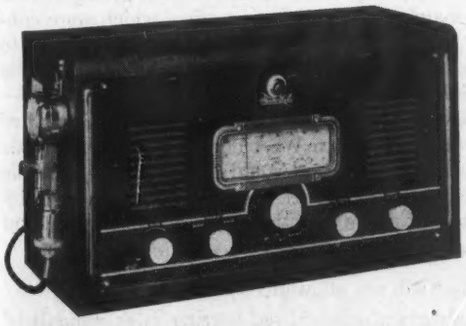

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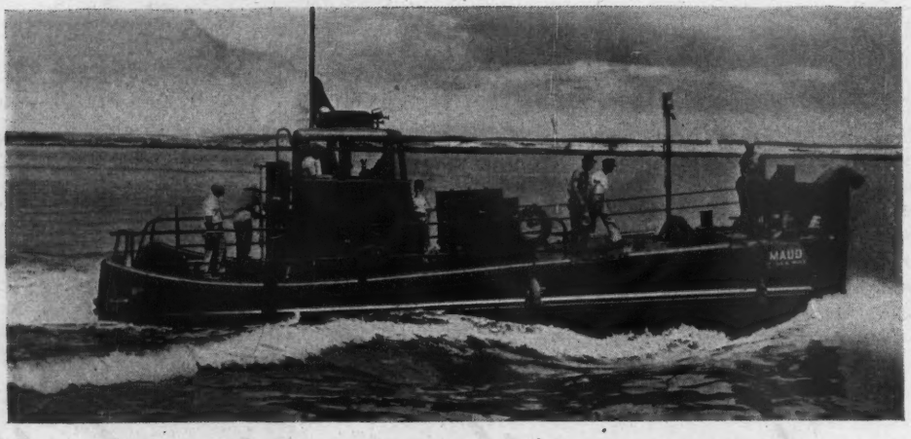
JOES GEARS

add maneuverability to Ingall's Sea Mules



Here's a work boat with a powerful kick in every pound of its compact hull. And how the Sea Mules get around with their equipment of Joes Reverse Gears.

SNOW-NABSTEDT GEAR CORPORATION

Hamden, New Haven, Conn.

to be of no consequence. In fact, in tests it was proven that the steel wheels were just as efficient as the best machined bronze propellers.

As a "last word," I feel it important to point out that the various wheel manufacturing concerns publish booklets which are instructive and helpful in ordinary cases of wheel selection. Their service also includes helpful advice on special problems and the inquiries of yachtsmen are always welcome.

REPORT FROM WASHINGTON

(Continued from page 83)

discusses the settlement with the owner. The committee prepares a detailed report on the extent of repairs necessary to restore the craft to the condition she was in when taken over by the Service. The owner is informed that the Coast Guard proposes to return his boat to any reasonable spot that he may designate and that a survey of the necessary repairs has been made. The owner then accepts the return of his boat (which acceptance does not prejudice any claim he may make), makes his own survey, estimates repair costs and submits his claim. When he has done so, he is invited to discuss this figure with the Board in a personal meeting, where all make a joint endeavor to work out a reasonable figure. In no case is a settlement made with finality unless the owner has had the opportunity to discuss the amount of adjustment with the Board. If he is absent, his acceptance of the craft does not preclude such discussion, for he can meet with the Board at some later date. In most of the returns, there has been no protracted discussion beyond the initial meeting with the Board."

Question — "What about the resale of yachts *purchased* by the Government?"

As in the case of the return of Coast Guard vessels, the fly in the War Shipping Administration's ointment is the run down condition of nearly all of such yachts which, until recently, have been in Government service. The "Achilles heel" of the whole matter is making the financial adjustment to cover the cost of their reconditioning.

The law under which the many yachts under 1000 tons were purchased by the Government stated that when they were no longer needed they were to be returned to the War Shipping Administration as "surplus property." The law also provided that the former owner have the first right to repurchase his boat, and at a figure which would enable him to put her into serviceable condition. However, due to the way the law was written, the WSA is now trying to get sealed bids — in those cases where the owner will not agree to buy back at the Government's figure which appears to be the current market price — less the cost of reconversion and use. The hitch is that in a great many cases the boats are in such bad shape that the cost of conversion is almost as much as the original Government purchase price. Another complicating factor is that the successful bidder has no means of getting priorities to obtain material required for the vessel's conversion.

The opening, early in December, of the sealed bids on the first group of boats offered for sale showed the bids to be absurd, ranging from $100 to $5,000 for the same boat. Of the 25 or 26 boats put up for sale, only a few of these boats brought forth fair bids, the remaining ones producing offers which were considerably below the current market level. The WSA, trying to make the best of a bad situation, is now in a dilemma and is apparently deciding whether or not to accept these bids — which they undoubtedly consider unsatisfactory — or to have the existing law changed. With WSA boats coming up for sale at a rapidly accelerating rate, it would appear that the whole matter might be solved, to the satisfaction of all concerned, by putting the matter of resale into the hands of experienced and qualified brokers.

Question — "What will gas allowances be in 1945?"

This subject, always a seasonal red herring, is as difficult to answer, today, as it was in 1944. The OPA states that the allowances which went into effect October 1st will remain in force until the character of the war changes materially. It may be

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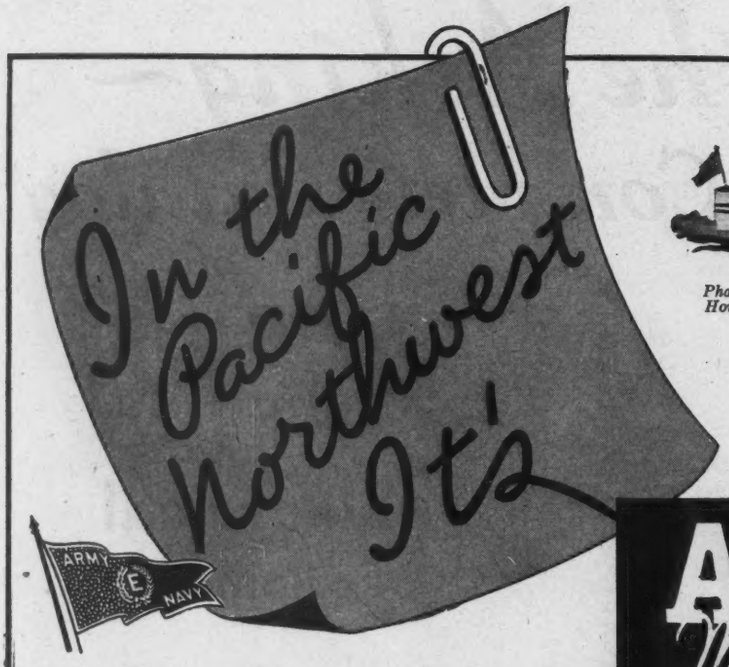

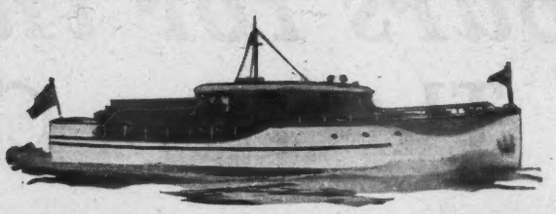

Phantom; 50' Twin-Screw Express Cruiser, built for Dr. Wallace Howarth, Portland, Ore. Phantom is now in Coast Guard service, and the owner is a captain in the U. S. Navy.

We are still 100% on war production, but call us after V-Day to figure on your next boat. Our peacetime production includes: Ocean-Going Cruisers, Auxiliaries, Sail Boats, Sport Fishermen and all types of Commercial Craft.

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assumed, therefore, that there will be no change until the European campaign has been concluded.

Question — "What will Coast Guard regulations be in 1945?"

It is probable that in 1945, assuming that there is a continuation of the present satisfactory strategic situation, most existing restrictions, including identification card requirements, on the operation of pleasure craft will be lifted, at least during the hours of daylight on the inland rivers, the Great Lakes, and along the Atlantic and Gulf Coasts. While it is possible that there will be some minor relaxation of pleasure craft restrictions on the Pacific Coast, no major changes are anticipated along this line as long as the war in the Pacific continues. No definite statement regarding this matter can be made at this time as restrictions on the operation of pleasure craft are established by the Coast Guard at the direction of the Navy.

THE SHAPE OF THINGS TO COME

(Continued from page 81)

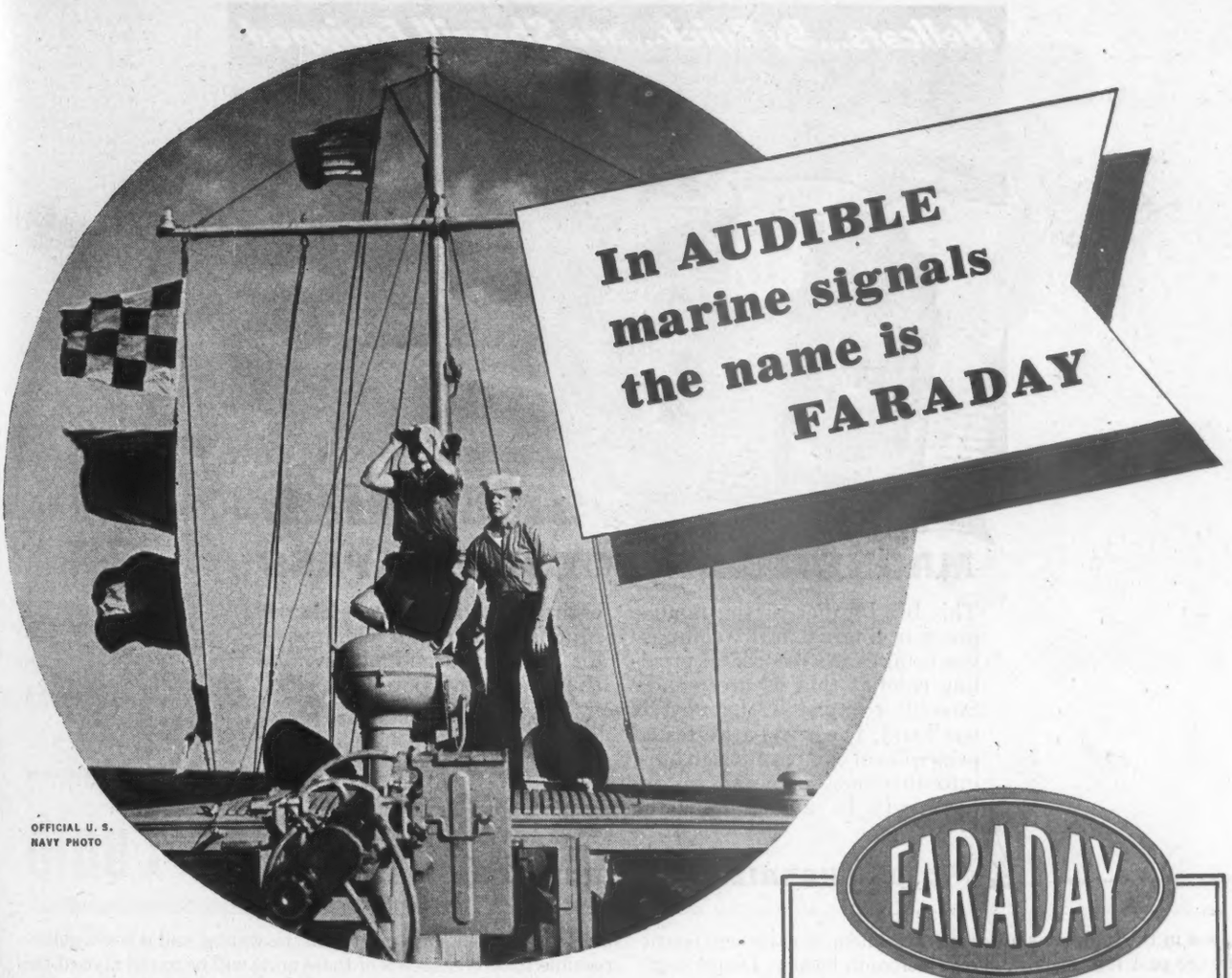
dows of transparent plastic. Many are due for a rude awakening if they expect to find these materials satisfactory for that purpose. The manufacturers of the transparent plastics are the first to admit that their product is soft and much more subject to scratching than is plate glass. In airplane design, where weight and streamlining are of paramount importance and durability and cost are secondary, the use of the new materials is amply justified but in boats, where these conditions are reversed, I venture to predict that, barring improvements undisclosed at present, plate glass will be found the most generally used and the most satisfactory material for windshields and windows. For hatches and skylights, certain of the transparent plastics will be found satisfactory if the unit is designed to allow for the dimensional changes of the material due to temperature changes. This can be accomplished by the use of rubber gaskets.

It is possible that we may see both fuel and water tanks made of a soft plastic material which will permit the tank to be collapsed like an inner tube for removal and inspection. Tanks of this kind have already been used in transporting petroleum products in ordinary box cars. This opens up many possibilities for the man who plans a long cruise. Extra fuel and water tanks could be carried on deck or in other parts of the vessel and be stowed below, out of the way, as they are emptied, ready for the next filling. Also if a permanent tank should spring a leak, it would not be necessary to tear out the whole interior of the cabin to get at it; simply collapse it and pull it through a handhole provided for the purpose.

There are reputed to have been developed some synthetic paints which will be a cause for much cheering upon the part of the yachting fraternity. A bottom paint so durable and antifouling that your bottom will need repainting only every two or three years sounds too good to be true. And topside paints in the same class are talked about, but as yet I have to see one in action. Here's hoping.

Another chemical contribution to better boating is the process, recently announced by duPont, of hardening, dying and stabilizing wood. By this process it is possible to impart to any lumber the characteristics desired as to durability and color, as well as a dimensional stability hitherto associated only with metal. This means that the less expensive woods may become available for boatbuilding, that the wood can be given any desired color — right through from side to side — and that units made from it will not swell and shrink with every change in humidity. This may turn out to be an important development to all those interested in boating, either as builders or as owners. There is another chemical treatment of wood that is not new but that has received a tremendous boost due to wartime conditions and that is the use of rot-inhibiting preservatives, principal among which are those with a copper naphthenate base. This preservative has proven effective in preventing rot in wood and has also demonstrated its effectiveness as an antifouling agent for submerged rope, such as docking lines or mooring cables.

Speaking of mooring cables brings up the question of anchors, and it is probably safe to say that more scientific work has been



OFFICIAL U. S. NAVY PHOTO

The Faraday line is complete

MEETS EVERY REQUIREMENT

Whenever you see the Faraday name on Navy and Merchant Marine type horns, bells, buzzers, or sirens, you know performance will *exceed* rigid wartime specifications. The complete Faraday line includes audible signals to meet every modern marine need, with better-than-necessary quality throughout.

All Faraday equipment has these advantages: It is easy to install. The housings are watertight. It can be counted on for dependable performance under toughest operating conditions. The Faraday name has earned the high regard of seamen whose lives may often depend on instant warning by audible signals.

Send for FREE catalog. Today Faraday Marine Signals are all spoken for by Uncle Sam's ships, but it's worth your while to ask for Catalog 43-M so you'll know the Faraday line when peace returns!

FARADAY

AUDIBLE ELECTRIC SIGNALS

MARINE BUZZERS AND BELLS

Design, construction and performance meet or exceed specifications of U. S. Merchant Marine. Clear, distinct bell tones — buzzers are sharp and strong. Peak performance under all conditions assured.

MARINE SIRENS

Made in two types, low pitch and high pitch—for AC and DC operation. Dependable performance—highest quality construction.

MARINE HORN

Heavy-duty, high power air blast signal for coding and general alarm use. Leads the field in high-power electrical signal horns. AC and DC operation.

FARADAY ELECTRIC CORPORATION

A consolidation of Schwarze Electric Co. and Stanley & Patterson

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the SHERRILL
MAGNETIC DIRECTOR COMPASS

This big brother of the famous pre-war Sherrill auto compass has established records in gruelling combat that assure greater Sherrill compass efficiency at war's end. The new, battle-tested principles of compass design built into this fine, precision instrument will be available in the entire peacetime line of Sherrill Magnetic Director Compasses for boat, auto and plane...and they'll sell at popular prices!

BATTLE COMPASSES TODAY!
AUTO AVIATION AND BOAT
COMPASSES TOMORROW!

SHERRILL RESEARCH CORP., PERU, IND.

done in the improvement of this vital item of yacht equipment in the past few years than ever before in history. Design engineering has been substituted for sheer weight with results that are truly revolutionary. The postwar yachtsman may look forward with confidence to being able to anchor his boat with lighter ground tackle than ever before. This will mean that an individual can handle a larger boat than in the past, if he wishes to, as the weight of the necessary ground tackle has always been regarded as one of the limiting factors in choosing one's boat.

It appears that postwar motors will be pretty much like those that we have known in the past, except that there will undoubtedly be some improvement in the power-weight ratio due to the introduction of new alloys and design refinements. The use of small diesels may be expected to increase, both for propulsion and for auxiliary equipment. The ubiquitious outboard will be more in evidence than ever for it has proved its usefulness beyond any doubt in the trials of war. Here the introduction of the new, light alloys will permit building more powerful motors for the weight than in the past.

For the navigator, there will be new and wonderful instruments, many of which were first developed to meet the needs of aerial navigation. There are new sextants, new tables, radically different compass designs which will make steering easier, direction finders whose efficiency is greatly increased and perhaps, who knows, radar. It is well within the range of possibility that buoys will be so equipped that they can easily be picked up in pitch dark or pea soup fog by radar. And the ship-to-shore telephone will become a commonplace. Radio equipment will be better and there will be more useful time signals and the like to aid the offshore navigator. Perhaps sonic depth finders will be developed for small boats. For fishermen who want to locate their favorite shoal, this would be a welcome addition to their bag of tricks.

A number of controls, some mechanical, some hydraulic and some electrical, have been developed and they will contribute much to the owner's ease and pleasure in handling his craft.

Highly efficient heating devices, using liquid fuel, have been built to warm our small craft in Arctic waters, and it is altogether possible that refinements of these units will be found aboard the boat of the man who likes to keep her in until the snow flies. Electrical cooking units have been installed aboard the PTs but the cost of installation and maintenance is such that there is little likelihood of their finding acceptance aboard pleasure craft unless new developments are made.

As far as design is concerned, I think it safe to say that, in general, the postwar yacht will not differ materially from her prewar sister. There will, of course, be exceptions to this statement, notably those hulls which are designed to take advantage of the newer materials but, on the whole, knowing how conservative the average yacht designer, yacht builder and yacht owner are, I feel safe in prophesying that, while the average postwar yacht will be equipped with many new and marvelous developments, her hull form and her construction will depart but little, if any, from prewar standards.

THE LURE OF THE INLAND WATERWAYS

(Continued from page 69)

now, are used by the Navy at Farragut Naval Base on the lake.

Now swing an eye down across Washington's great Teton Reservoir project, to Oregon, which has several great projects, and to California's new Shasta Lake. All of these are typical of what is happening in the new American "era of lakes." The United States Bureau of Reclamation now controls more than 80 reservoirs in 17 western states, and most are navigable. Tremendous Lake Mead, in Nevada, 115 miles long, a breadth of 35 miles at its widest, and more than 500 feet deep, is the largest. An idea of the extent of Lake Mead may be formed by comparing it with Long Island Sound. It is just as long, and a good deal wider than the Sound — and while much of the shoreline is precipitous, Lake Mead has many narrow reaches and coves.

"...jobs the officers didn't believe possible"

The Lieutenant who wrote this letter didn't waste words.

You have to read between the lines for the dramatic scene of a roaring PT attack, exploding torpedoes, and flaming Jap destroyers on their way down.

Here are the Lieutenant's own words:

"On our sixth mission, we made contact with two enemy destroyers. The result of this engagement was one destroyer sunk, and one damaged.

"We picked up 19 prisoners; 12 off the damaged can, and 8 off the one which sank.

"Except for the light of the moon period, the engines get very little rest. I know if you could hear the officers rave about them, you would feel very proud.

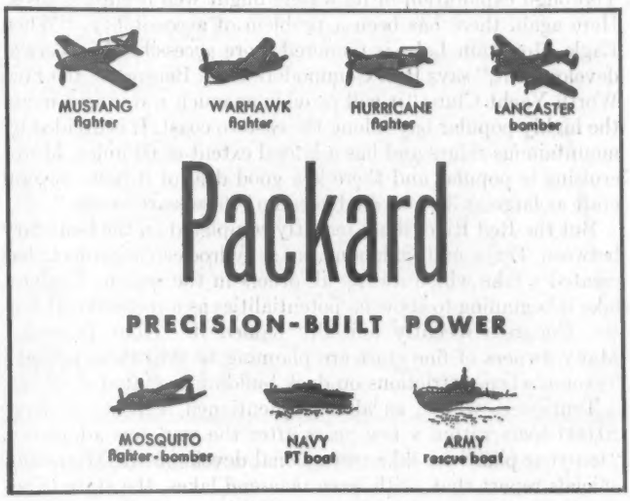
"I know we are doing some jobs that even the officers didn't believe possible.

"All of our boats are turning 2400 with a full war load."

As the Lieutenant who dispatched the above letter guessed, we're grateful for combat reports on the 12,000-and-more Packard engines that power all our Navy's PT boats.

And it's welcome news to hear that men like the Lieutenant are willing to bet their lives on them, *certain that they'll win!*

ASK THE MAN WHO OWNS ONE



75 lb. Danforth HOLDS *Two* DRAGGERS IN HURRICANE

• *TIP TOP—55-ft. dragger; 16-ft. beam; 7-ft. draft; 34 tons.*

From a statement by Capt. George Berg, Mystic, Connecticut, Skipper of the TIP TOP:

"During the Sept. 14th hurricane at 9:30 P.M., half an hour before the height of the storm, we could see that it was necessary to get away from the dock and we did so. As soon as we were past the end of the dock, we anchored. We couldn't see anything anyway. • We used a 3½" manila rope spliced into a thimble. We let out 25 fathoms. The wind was blowing Northeast at about 80 miles per hour and we were in twenty feet of water. • The CARL J., a sister ship, was pounding against the dock. She had no anchor. We swung her a line and hauled her away. When the wind shifted unexpectedly Northwest, we turned sharply. We both lay with the one 75-lb. Danforth and did not drag. • The anchor came up easily the next morning and the rope showed how deeply the anchor had buried itself in the soft muddy bottom. • To us this was a remarkable feat because one of the other draggers, a lighter boat, had a 200-lb. regular type anchor and dragged dangerously throughout the storm. • A 75-lb. Danforth that held two 34-ton draggers is the best recommendation I could give or receive. I've never seen anything like it. I'd go on record anytime to recommend the Danforth anchor."

Danforth Anchors protected by U. S. and Foreign Patents

FOR FREE FOLDER, WRITE

R. S. DANFORTH • 2121 ALLSTON WAY • BERKELEY 4, CALIF.

• *BUY WAR BONDS*

Even once-arid Utah now boasts (in addition to Great Salt Lake, a flourishing boating center) no fewer than 16 lakes and reservoirs. Largest of these is Utah Lake, 24 miles long and 7 miles wide. Harbor development plans here are typical of those for many other American lakes. A $1,000,000 boat harbor was being excavated when war began and will be completed after the war. Indications are that there will be few navigable lakes in the United States after the war which will not have good harbors, repair facilities, storage yards and boat sales agencies, or even sub-assembly plants. Throughout the TVA lakes, farther east, heavy development of marinas is planned.

Yachting on the lakes of Texas, Oklahoma and Arkansas is now well established. The development has been due, largely, to the creation of *hundreds* of sizable lakes for flood control and hydroelectric projects. One of the largest Texas lakes is Eagle Mountain, 24 miles long, some miles west of Fort Worth. Thorough exploration of its waters might well occupy a week. Here again there has been a problem of accessibility. "When Eagle Mountain Lake is rendered more accessible by postwar development," says Past Commodore C. A. Benson, of the Fort Worth Yacht Club, "it will provide as much water as some of the highly popular bays along the eastern coast. It is divided by mountainous ridges and has a lateral extent of 60 miles. Motor cruising is popular and there is a good deal of it now. Several craft as large as 34-foot double-cabin cruisers are in use."

But the Red River dam, recently completed on the boundary between Texas and Oklahoma as a hydroelectric project, has created a lake which dwarfs all others in the region. The new lake is beginning to show its potentialities as a recreational center. Congress recently officially named it "Lake Texoma." Many owners of fine craft are planning to ship them to Lake Texoma when restrictions on dock building are lifted.

Tennessee, which, as already mentioned, expects to have *20,000 boats* within a few years after the war, has adopted a "ten-year plan" for lake recreational development. Minnesota officials report that, with *seven thousand* lakes, the state is beginning to "awaken" to their possibilities and will make them more accessible. The Mississippi State Planning Commission has a postwar program calling for construction of 305 inland lakes "thereby placing a lake within 15 miles of every family." ("A boat in every garage" might well become a Mississippi motto!)

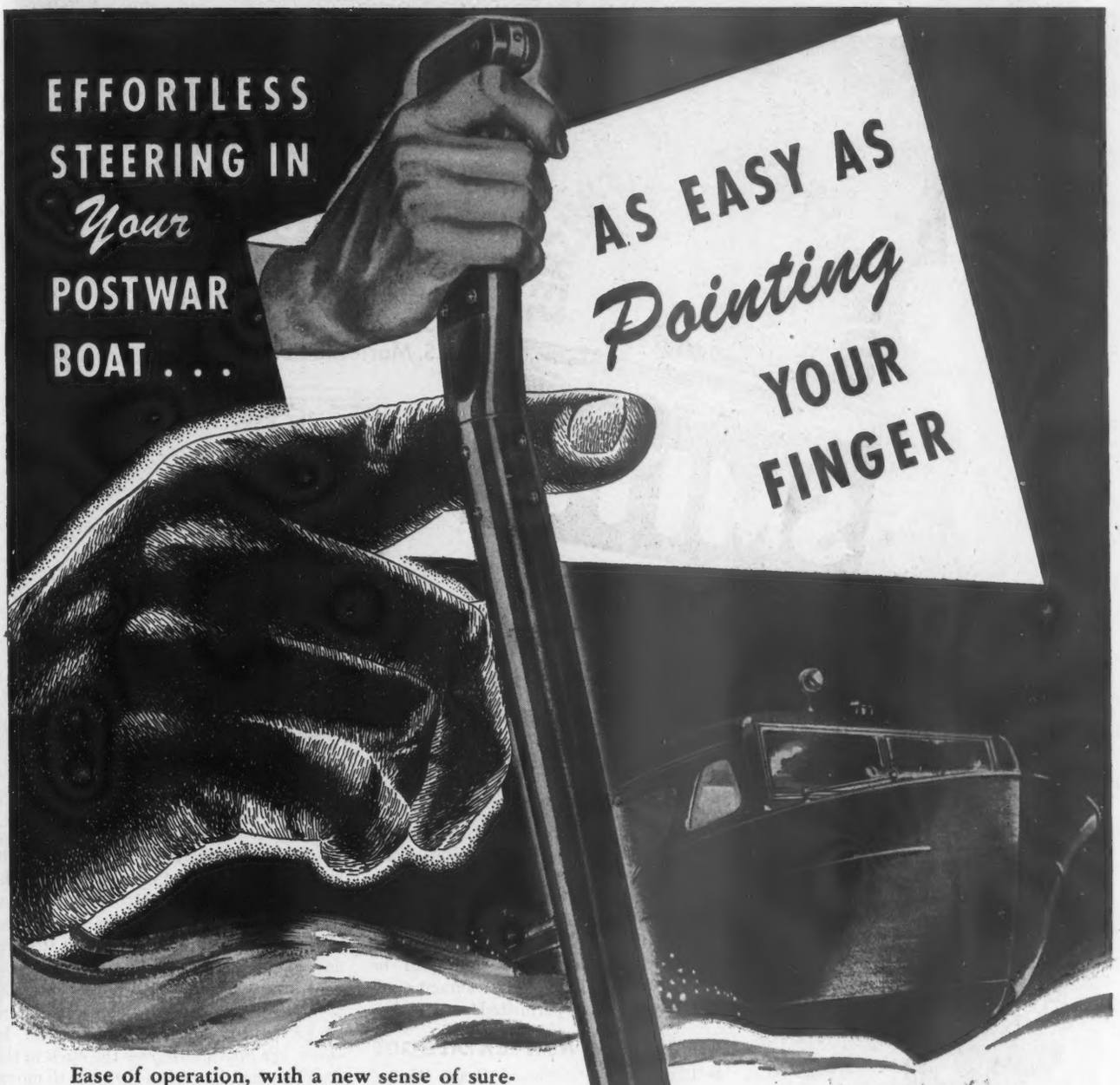
Nor is the era of the establishment of new big lakes over. It may be, in fact, merely beginning. If the proposed Missouri Valley Authority and Arkansas Valley Authority materialize, there will be dozens of huge new lakes in the midwest and southwest.

All told, TVA is adding 25 new "Great Lakes of the South" to the Tennessee Valley region, and nine dams now provide 650 miles of scenic cruising water from Paducah, Kentucky, to Knoxville, Tennessee. There are 6,000 boats on the lakes now, and TVA expects to see 12,000 after the war. Boating interest here, instead of declining during the war, has increased and boat dock operators reported heavy activity during 1943 and 1944. Most of the 6,000 boats in the area are found at thirty-five privately-operated docks and in TVA marinas.

One of the most forward-looking states is Illinois, whose Department of Conservation is working on "a $20,000,000 postwar program of constructing lakes all over our State." Michigan and Wisconsin, with 13,000 lakes between them, already have well developed boating facilities but expect to see more boating after the war.

Motor boat and sail boat builders know what is going on. The general manager of one large manufacturer said he was receiving "many inquiries from dealers who plan to build new service and storage facilities on inland lakes and rivers. A sales executive for another large builder reported many inquiries for trailers to be used by owners who want to divide their cruising and racing time between two or more bodies of water.

And so the industry is alive to the possibilities. With progressive "yachting spirits" and progressive manufacturers working together, there may some day soon be as much inland lake and river yachting in America as there is now on the Great Lakes and the Atlantic and Pacific coasts.



Ease of operation, with a new sense of sureness and safety, will be yours to enjoy with the Morse Stick Control.

The Morse Stick coordinates steering and engine control in a single unit—under the light touch of one hand. It makes steering, even under the roughest of water conditions, as easy as pointing your finger.

Look forward to a brand-new conception of pleasure boating with *your* Morse Marine Control System. It will be available as soon as war-time restrictions are lifted.

WHY YOU WILL WANT MORSE STICK CONTROL

Steering and transmission are operated hydraulically — controlled with ease by a single unit — the "Stick".

In steering, 18 or more feet of hard wheeling is reduced to only 18 inches by Morse Stick.

Instantaneous rudder action.

Position of stick indicates direction of rudder.

Stability and ease of operation obtainable with no other equipment.

Morse **MARINE CONTROL SYSTEM**

ARMY E NAVY

THE MORSE INSTRUMENT CO., 25 Clinton St., Hudson, Ohio

CUP DEFENDER FINISHES
SMITH
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Specification Materials for
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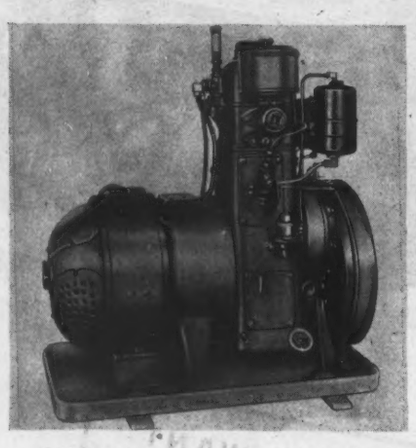


A U.S. Motors' single-cylinder diesel generating set, either 2 or 3 kw.

M-P CONTROL DEVICES

▶ The growing line of marine engineered equipment originated and manufactured by Marine Products Company, Detroit, Mich., includes single and double controls for clutch and reverse gear; an ingenious combination control of throttle and reverse gear; single and twin throttle controls with finger tip action, self-locking; Thermovalve, a device for control of engine temperature; a new electric bilge pump operating on 12, 24, 32 or 110 volts; and the well-known line of M-P centrifugal pumps, now built in five sizes, either rotation, for operation under 3600 r.p.m., with capacities of 30 to 385 gallons per minute.

NEW BUDA ENGINE

▶ The Buda Company has designed its model 6-DCMR-844 to incorporate the latest type of marine gears, heat exchangers, water pumps and the well-known Bosch fuel system. This Buda-Lanova diesel marine is now in wide use by the Army and Navy, and will be available for yachtsmen the moment civilian distribution is permitted.

ATTWOOD'S NEW CATALOGUE

▶ Plans of the Attwood Brass Works, Grand Rapids, Mich., for postwar production are so far under way that a new catalogue is practically completed. Hundreds of items not previously manufactured by the company are included in the catalogue which is scheduled for release shortly after the end of hostilities in Europe.

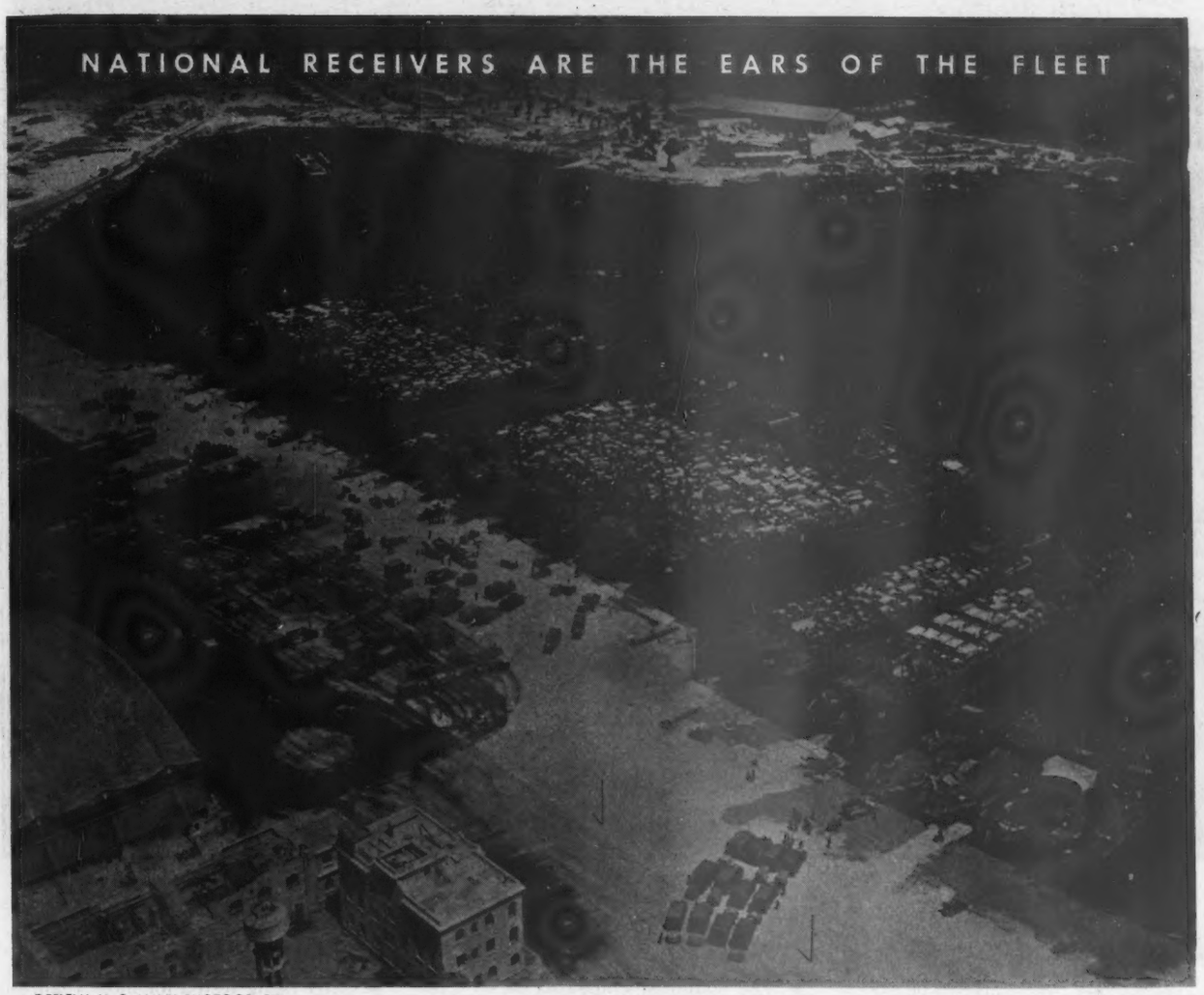
The Marine Product Co.'s electric bilge pump is self-priming

MORSE CONTROL LEVER

▶ The Morse Marine Control System is the result of much research in an effort to simplify the handling of power boats. The system comprises a control lever, similar in appearance to the stick in an airplane, in which all essential functions of steering and engine control are centralized. This control lever or "stick" moves laterally to control the rudder and forward and backward to control the propeller. In effect, the operator moves the stick in the direction that he wishes the boat to move, with all engine functions automatically coördinated.

The steering action functions through the entire range of engine control positions and gives the operator constant and complete rudder control while starting, stopping and reversing. The stick moves laterally through an 18 inch range. This movement is transmitted to the rudder through the Morse variable ratio steering gear, a simple and frictionless device which provides high stick-to-rudder ratio in all normal cruising positions with a progressively decreasing ratio as the stick is moved to either side of center. This system makes possible an extremely sensitive control in cruising positions and at the same time allows full and instant rudder travel from either extreme.

Installations on twin engine boats have two control sticks side by side. Each stick controls its engine independently but they are linked together in their lateral movement for steering.



OFFICIAL U. S. NAVY PHOTOGRAPH

EACH LST HAS TWO NATIONAL RECEIVERS

National's tradition for painstaking design and skilled craftsmanship goes back for a generation. This war's Army-Navy E pennant with two stars is matched by a similar citation won by National in World War I.

In peace as in war, National Receivers have been a favorite choice wherever dependability and high performance are essential. Airways, commercial communication companies, scientific expeditions to remote places and amateurs, all chose National Receivers in peace time just as the armed forces choose them now.

For your post-war receiver, look to National.

HRO

NC-200

NATIONAL COMPANY

MALDEN MASS, U. S. A.

NATIONAL RECEIVERS ARE IN SERVICE THROUGHOUT THE WORLD

An All-New Gar Wood Fleet Coming... After Victory!

GAR WOOD MOTOR BOATS

Depend on Gar Wood to include all the new wartime improvements in the post-war fleet now being developed. The fast PT-type bottom design will be used in the De Luxe Runabout and Utility models. The Navy-type bottom design will be used in the Standard Utility models. Prices will be highly competitive with comparable products.

DEALERS: Some territory available. Mail your application now for a post-war franchise.

NEW DESIGNS
NEW ENGINEERING
NEW STYLING

GAR WOOD POST-WAR BOATS

GAR WOOD INDUSTRIES, Inc. BOAT DIVISION, Marysville, Michigan

BUY U. S. WAR BONDS NOW

HOISTS AND BODIES . . . WINCHES AND CRANES . . . TANKS . . . ROAD MACHINERY . . . HEATING EQUIPMENT

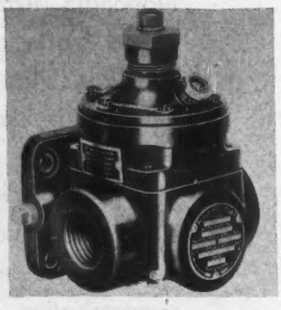
HAMILTON CHRONOMETERS

▶ There is very little that can be said at this time regarding the Hamilton Clock Co.'s postwar plans, mainly because they are still principally engaged in war work. The company's outstanding accomplishment is the production, in quantity, of the Hamilton Marine Chronometer which is used on all large surface craft of the Navy as a master time source for marine navigation. Many of these chronometers have maintained daily rates, over a test period of thirty days, as low as 0.28 seconds. Another important Hamilton-designed navigational timepiece is the "35" size chronometer watch. Either unmounted or mounted and swung in gimbals, this timepiece is used on smaller ships of the Navy as a master time source, and is ideal for pleasure boats.

The size "35" Hamilton chronometer watch, either unmounted or mounted and slung in gimbals, is ideal for small craft use

CLEAN FLO WATER COOLERS

▶ The Walter Machine Co., Jersey City, N. J., manufactures a new type of outboard (keel) cooler of improved design offering unusual advantages. They are made in various sizes and models to suit either gasoline or diesel engines.



400 g.p.h. is the capacity of this Pesco fuel pump

PESCO'S HYDRAULIC PUMPS

▶ Yachtsmen who are thinking of postwar building will be interested in many of the units manufactured by Pesco Products Co., Cleveland, which can be utilized where hydraulic power and control can be used to advantage. Pesco, a division of Borg-Warner, is now furnishing fuel pumps, portable and stationary electric motor-driven bilge pumps, air pumps and other related accessories for marine use. After the war the company will produce these units for the yachtsman.

PANISH CONTROLS

▶ After being tested for more than four years in combat service, Panish remote controls for reverse gear and throttle are considered to be one of the outstanding developments in the marine field.

These controls are a compact, fully enclosed, electro-mechanical mechanism for operating any type or size of reverse gear on any internal combustion marine engine, either gasoline or diesel. They require no limit switches, slip clutches, overload clutches, solenoids, time fuses or other limiting devices; neither do they necessitate any positive or negative pressure, air, liquids or other operating media. All equipment is fully enclosed and waterproof. Installation is simple.

CLIMAX DIESELS

▶ Two Climax diesels, models D-148 and D-297 — two and four cylinder, full diesel engines — are suitable for marine installations. At the present time, the manufacturer's production of these two models is limited to power units and generating sets, but after the war marine propulsion sets, using Joe's reverse and reduction gears, will be produced. Both models will also appear in marine auxiliary units. The Griffin Equipment Co. expects to use these diesels in units of this type, combining a pump, generator and compressor in one compact assembly.

The Climax Engineering Co. is located in Clinton, Ohio.

YOUR SOURCE FOR **GENUINE MAHOGANY**

Large stocks of Genuine Mahogany and other types of marine lumber in a wide range of sizes and lengths, are now available for war construction. ● As soon as government restrictions are lifted, this lumber will also be available to boat builders for any type of construction. ● Don B. Wallace & Company are specialists in marine lumber. They are familiar with marine construction and can be of especial service to you in supplying your requirements.

DON B. Wallace & CO.

PENOBSCOT BUILDING • DETROIT 26, MICHIGAN

With America's leading marine engine makers, it was love at first sight. As soon as they saw Paragon Gear assemblies, they realized these were the transmissions that were worthy of their finest motors.

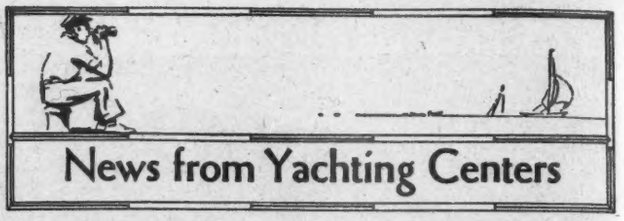
For Paragon Gears give boats that quick getaway, that maneuverability and maximum efficiency which wise boat owners have learned to expect. They're dependable too — will give top performance for the life of the craft.

That's why year after year it's Paragon. Write for information.

TRANSMISSIONS FOR MARINE INTERNAL COMBUSTION ENGINES

Paragon REVERSE & REDUCTION GEARS

PARAGON GEAR WORKS, INC. • TAUNTON, MASS.



News from Yachting Centers

FROM SAN FRANCISCO BAY

By Jesse L. Carr, M.D.

▶ Yachting activities have, with the advent of winter and the opening of the duck season, been largely reduced to social activities. The Corinthian Y.C. maintains its semimonthly meetings, and a large aggregation collected to see the three-reel feature "Sailmaking." The St. Francis Y.C. celebrated its 16th birthday on December 9th with a dinner dance in the clubhouse at the Municipal Yacht Harbor. In the South Bay, the Sequoia Y.C. held its last meeting for 1944 shortly after the annual installation dinner given for the new officers. The Palo Alto Y.C. recently held its annual Ladies' Night at which a number of Coast Guard films were shown. The South Bay Y.C. converted its Vice Commodore's cruise into a stag dinner at the club, while the Ladies' Auxiliary held a progressive dinner elsewhere in the city. This club plans a large New Year's party for the South Bay. All of the South Bay yacht clubs and the Marin Y.C. have been active in providing aquatic activities for Waves stationed in their local areas. The Marin Y.C. held its installation dinner in the middle of November at which Tom Boyd was inaugurated as commodore.

▶ The Maritime School has bought an 85′ purse seiner for training purposes. She will be docked at the Coyote Point Y.C. Dredging at this club is nearly finished and the channel along the new Maritime School dock is now being cleaned out.

▶ Coincident with the speedup in the Pacific, many former yachtsmen are returning home or being shifted. Lt. Harold Martin is back from Attu. Larry Jordan, Jr., is in town after having completed his missions as a navigator in a B-17. Victor Herbert is back after 16 months in the South Pacific. Billy Langlais has left San Francisco and is somewhere south and west of Honolulu. Rod Fraser, son of Vice Commodore Fraser of the St. Francis Y.C., has been appointed second officer in the Maritime Service, having risen from the ranks to this post.

▶ Dr. Nicholas Pedersen has bought the Bear Class *Trigger* from Bill Langlais. G. R. Fisher has sold his 27′ Hunter cruiser to D. G. Milne, of San Jose.

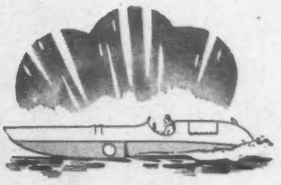
▶ In the commercial field, the end of Army and Navy construction is in sight at many of the yards, and commercial building is either planned or under way. Within two months, Martinolich Shipyards will deliver the remaining two freight and supply Army transports now under construction. This will bring to a close the contract for five of these boats, three of which have already been delivered. They are 148′ long and powered with 875 hp. Fairbanks-Morse diesels. Now under construction is a 149′ wood tuna clipper, powered with a 1200 hp. Enterprise diesel. Being refitted at the yard is a 124′ steel clipper hull built in Tacoma, now being powered with an 800 hp. Enterprise diesel. She will be operated by Al Davies and Anthony Martinolich.

▶ With the dredging of the deep midchannel in Richardson Bay and its use for deep water freighters and a regular ferry service, the Sausalito yacht harbor has filled in, there being a shoal in the center of the harbor at present over which there is less than three feet at low water.

▶ Apparently from surplus stock, Johnson & Joseph, ship chandlers, announce the availability of various sizes in stainless steel wire rope. This firm has also recently acquired the residual stock of small boat fittings previously handled by Hubbard boatworks in Southern California.

AN ANNOUNCEMENT OF UNUSUAL IMPORTANCE

With Victory... Ventnor will create and build a new and complete line of fine boats... available everywhere through Dealer Market!



WORLD'S FASTEST BOATS by Ventnor

Gold Cup..... 99.884 MPH
Why Worry - W. E. Cantrell

Class C ..... 33.180 MPH
Eagle - Edison Hedges

Class E..... 58.395 MPH
Hi-Ho II - Geo. Ward, Jr.

Class K..... 61.700 MPH
Lady Gen VI - David Gerli

225 Cu. In..... 66.639 MPH
Tops III - Jack Cooper

225 Cu. In..... 73.170 MPH
Tomyann III - Jos. J. Taggart

DEALERS! Write us today for details of the greatest money making opportunity ever offered in the Marine Field. Franchises will be granted for the sale of our complete post-war line of high-performance stock boats . . . including a mile-a-minute Cruiser . . . boats of every type to meet the demands of all ages for speed, cruising, fishing, sailing, or outboarding.

SINCE 1902 VENTNOR

"Bonds Today . . . Boats Tomorrow"

Address inquiries to Department C

BUILDERS OF CHAMPION CRAFT ★ VENTNOR BOAT WORKS INC., ATLANTIC CITY, N. J.

"DEE DEE" PRESENTS OUR
DYER DHOW SENIOR

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TODAY the best Engineering Skill and Scientific Tests are being devoted to perfecting its every detail.

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TOMORROW a Proven Ship will be offered you with hitherto unattainable comforts and at a price made possible by our wartime developments in line production.

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ALL DYER DHOWS are protected by letters patent promising you something extra special in performance and sailing enjoyment.

"Keep 'Em Sailing"

THE ANCHORAGE · INC

WARREN • RHODE ISLAND

LAKE MICHIGAN BREEZES

By Warren T. Davis

▶ The period of nominating committee reports, annual dinners, winners' dinners, speeches, prize giving and dinghy sailing has been completed and the regenerative, hibernating period, when sailors only dream of yachting, is upon us. Officers and committees are not hibernating; in fact, this is the period when such forms of animal life must organize and plan for the next season. Various clubs are maintaining social activities such as Sunday morning breakfasts, weekly dinners, monthly entertainments, and dances. The Cruising Club, which offered a correspondence course in piloting and dead reckoning to its members last spring, has started another group into the mysteries of how to figure distances run and direction. More than 200 members enrolled in this twelve weeks' course last spring and about 100 more started in December.

▶ Jackson Park Y.C. has elected officers to lead the club in 1945. E. G. Daniels is commodore; vice and rear commodores are A. A. Walker and Robert Dillman; J. A. Richter is treasurer, and that doughty navigator Herbert Gaetjens is secretary. This club has about the largest Star fleet in the Chicago area. During the past season, the Herbert Cup Series and Napier Trophy went to F. R. Black, in *Silver King*. Other coveted Star prizes were won by Richard Stearns II in *Shrew*, taking the Memorial Day race, and R. A. Hess' *Altara*, the Lady Skippers' race. Jackson Park Y.C. is located at 6400 South in Chicago in a fine club building overlooking a landlocked harbor. A replica of one of Columbus' caravels lies (floating or on the bottom) to the south of the club. Dinghy racing has gone forward at this club this fall.

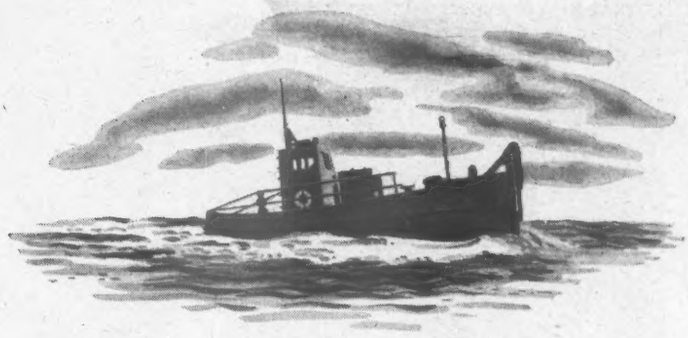
▶ The Michigan City Y.C., with one of the most attractive clubhouses on the lake, has reëlected T. M. Blackwood to the skipper's bridge. L. E. Schaeffer and G. E. Calvert are to be vice and rear commodores, respectively. H. V. Herbert has been elected as custodian of the funds and P. T. Wineman as secretary. This club has a fine record in junior work. Raleigh Moffett is the new junior commodore, with Peter Urnes, Barry Heise and Stuart Brolly as the other junior officers.

▶ Along with the routine problems confronting L.M.Y.A. committees are some new problems, such as considering the adoption of the Vanderbilt racing rules under which the Chicago Y.C. closed races were run in 1944; the preparation of new feature pages for the Year Book, which is promised for early spring delivery; a booklet on junior activities and a more uniform method of running races.

▶ The Chicago Y.C. has reëlected Philo H. Danly for his third term as commodore. His record in this job is tops. The other offices are being filled by George Sollitt and Henry W. Augsten, who are now vice and rear commodores. Neville Pilling and Edward Decker are secretary and treasurer. The Chicago Y.C. has a long and successful record and, due to the vigor of its officers and directors during the past few years, the club has continued to grow in its service to yachtsmen. This past year a number of power boat men coöperated extensively in running the sail races, and these were specially honored at the Winners' Dinner, with awards for each.

▶ Lew Gilbert, of the Chicago Y.C., sold his R boat *Pidgie* to Webster Woodmanasse, of Milwaukee. In the Chicago Y.C. dinghy fleet there has been enthusiastic competition in a long series of races held each Sunday. Joan and Donnie Buckingham and Paul and Laurie Cook have acquired dinghies, and Ed Schnabel, Jr., bought Ed Lethen's. The spirit of good fellowship and humor seems to be far greater among the small boat racers such as these dinghy fleets than where the big money is invested. Funny prizes, hilarity, short courses and numerous races in a day account for a lot of the difference. Betty and Harry Nye, Jr., in their dinghy (Class D) have won the following: Salt Water, Leeds Mitchell, Sweepstakes and Commodore P. H. Danly trophies. Ed Schnabel, Jr. and Sr., have won another

LOOK TO CREATIVE ENGINEERING FOR PROGRESS AFLOAT



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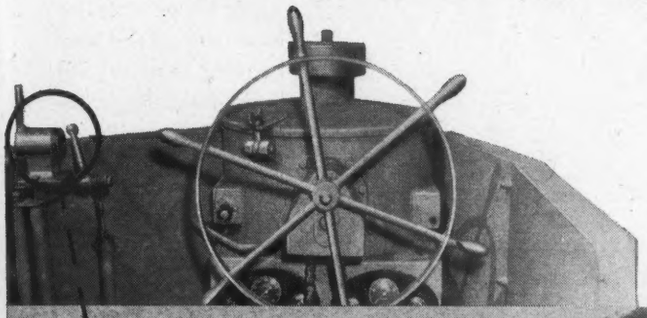

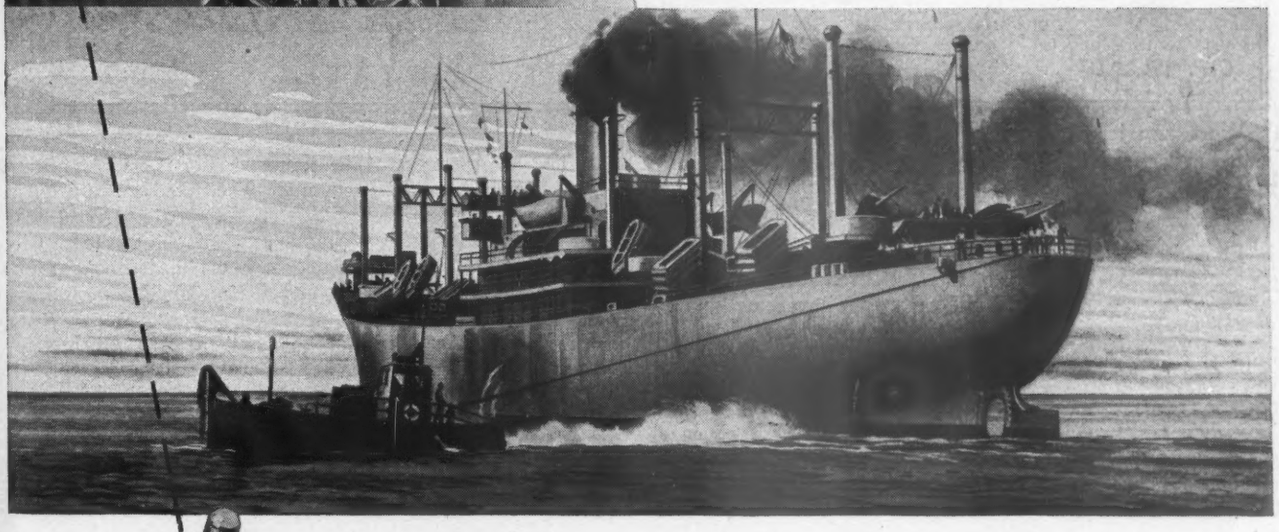

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four, the Sam Clarke, Karas Bowl, Beaton Market Basket and one other — name unknown, but perhaps named the Kentucky Derby. Jack Vilas, Jr., won the Schnabel dinghy trophy.

▶ Reporting elections and meetings and dinners, your correspondent becomes conscious of the fact that the droves of flag officers active and past could well use up the government postwar surpluses of gold braid if only it could be made the style for such "actives" and "pasts" to wear uniforms. Now that the Navy has revived the rank of commodore, we expect an agitation on the part of the club secretaries and treasurers to have their ranks created in the Navy. It has been further suggested that to avoid having so many commodores we either kill off those who become "past" or simply reëlect for sixteen years those we have.

MASSACHUSETTS BAY FLASHES

By Ed Earle

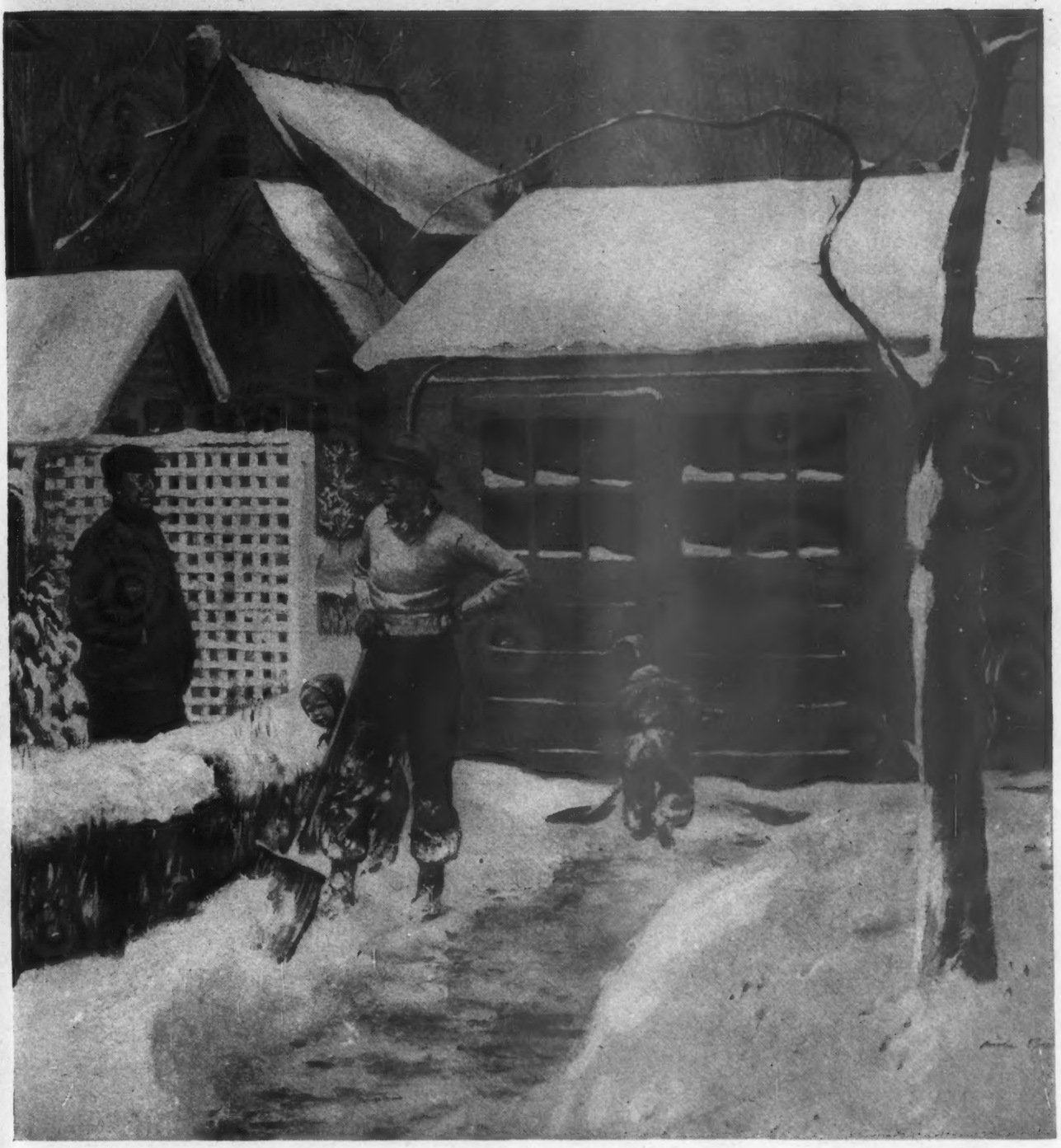
▶ The New Year brings the big boats back to Marblehead. There may be a shortage of duck, with second-hand sails at a premium and the green light is still to be snapped on new building materials but yachting tonnage will be increased this season by the return of the "bigger stickers" from the war. A large bit of the old harbor setting will be the 109′ steel schooner *Cleopatra's Barge*, formerly owned by Francis Crowninshield, which has just been sold after service with the Coast Guard. She has been acquired by Porter Johnson and will be renamed *Dee Dee Jay II*. The famous two-sticker will go from City Island to Frank Sample's Boothbay yard for reconditioning and then back to her old mooring off Fort Sewall — in Marblehead Harbor.

▶ Another big boat at Marblehead this summer will be the 73′ ketch *Valkyrie* sold by Col. Frederic Pope to J. M. McDonald through the office of John G. Alden. She was originally the Alden-designed, Lawley-built *Arbella* of the late Robert Saltonstall. The 35′ water line Alden-designed cutter *Aries* has been acquired by a Canadian yachtsman. The noted Eastern Y.C. schooner *Wildfire* has been sold from the Estate of Frederick Flood to Richard Lyman, of Camden, where she will be reconditioned. John H. Blodgett, of the Eastern Y.C., has bought the 55′ water line, clipper bow schooner *Mistral* now being reconditioned at Dion's Yard, Salem, after Coast Guard use. She was designed by Francis Herreshoff and built by Britt Brothers in 1938.

▶ Cy Young held his first official meeting as commander of the Boston Power Squadron. There was an enthusiastic turnout at the Hotel Kenmore. The nominating committee elected included Chairman Henry Laro, Ray McKittrick and Bill Boudrot.

▶ In addition to government and commercial work, the design department of Eldredge-McInnis, Inc., has drawn up plans for postwar boats among which are a 38′ cutter, a 36′ ketch, a 25′ sloop, a 22′ auxiliary knockabout, a 40′ sport fisherman and a 38′ sedan cruiser. Sales through this office include the Class S sloop *Elinor* from Joseph Pulitzer to A. Ralph Aldrich; the auxiliary cutter *Idlewild* from P. F. Wild to J. W. Shaw; the 31′ auxiliary sloop *Little Skipper* for Paul Alexanderson to a local yachtsman; the 30′ sloop *Tonga* from Gluyas Williams to P. R. Bosworth, and the 41′ Chris-Craft *Sea Siren* from Dr. G. H. Wilber and R. C. Mertens to Leonard Walsh.

▶ Henry Baay, of Marblehead, has acquired the 49′ shoal draft, Alden-designed motor-sailer *Shoal Water*, from Roscoe H. Prior, the 32′ yawl *Mischief* from E. Sohier Welch and the 45′ ketch *Yram* from Howard L. Rich through the office of Eldredge-McInnis. Baay plans to make these boats available for chartering. His 53′ schooner *Troubadour* has been chartered for the 1945 season to Joseph E. Pulitzer, of Bar Harbor. Through the office of John G. Alden, Baay has sold the 42′ ketch *Caribou* to the Rev. E. P. Caplette, of Southbridge, and the 40′ twin screw Wheeler *Poodle Pub* to a Lawrence yachtsman.



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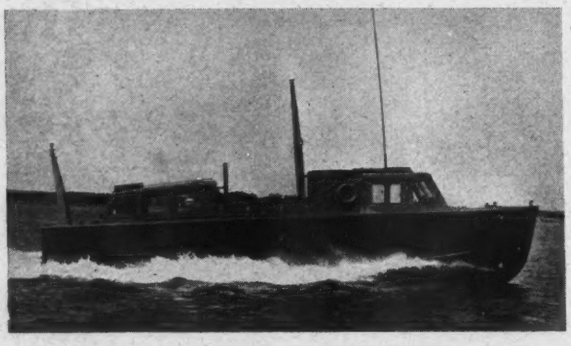

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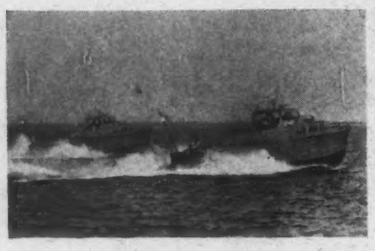

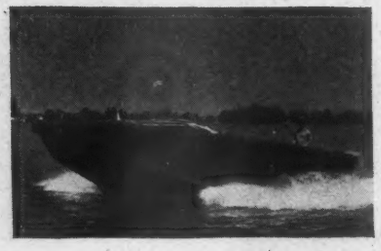

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DETROIT JOTTINGS

By George E. Van

▶ The new year brought new commodores and the parade of the three-starred gentry was as bright as the milky way.

Our parent body, the Interlake Y.A., starts out with a membership of 55 clubs representing roughly, 3,000 yachts and 10,000 yachtsmen. As our parent body it, supposedly, makes us legitimate and this year the ILYA selected Jimmy Biedler, of the Toledo Y.C., to succeed Joe Nagel, of the Edison B.C., as its commodore. Commodore Biedler is a yachtsman thoroughly familiar with the goings-on and needs of the Interlake. He has been an outstanding and active member of both the Toledo Y.C. and the ILYA. He helped revive the now classic 70-mile Mills Trophy Race around the western end of Lake Erie and has held most of the offices in the ILYA. Les Mylander of Sandusky is vice commodore and Ed Kiefer of Port Huron, rear commodore.

▶ In Fred Meno, Jr., the Detroit Y.C. boasts of a sailing commodore once again. Meno is an old catboater and last season won the DYC championship and the Detroit River title sailing the single-stickers. His son, Freddie Meno III, also is a fancy stickman and Commodore Meno teamed with his wife to win the Husband and Wife Race this year—and the two ended up on speaking terms. So you can see he's some fellow. The Meno family live aboard their 40-foot ketch *Squall* summers. *Squall* prowls all over the Great Lakes and is a regular entry in the Interlake regattas and the Mackinac Race.

▶ Ted Werthman is at the head of Bayview Y.C. He's a veteran of Mackinac racing and skipper of the 60′ yawl *Algonkin*. . . . Cecil B. Thomas is Grosse Point Y.C's new commodore and one of the reasons the big outfit out on Lake St. Clair has come back so strong in yachting. C. Stewart Baxter is head man at the Detroit B.C. in the 105th year of its existence; Marion Seward was elected as the Edison B.C.'s commodore and Cal Sutton assumed the 3-star office at the Crescent Sail Y.C.

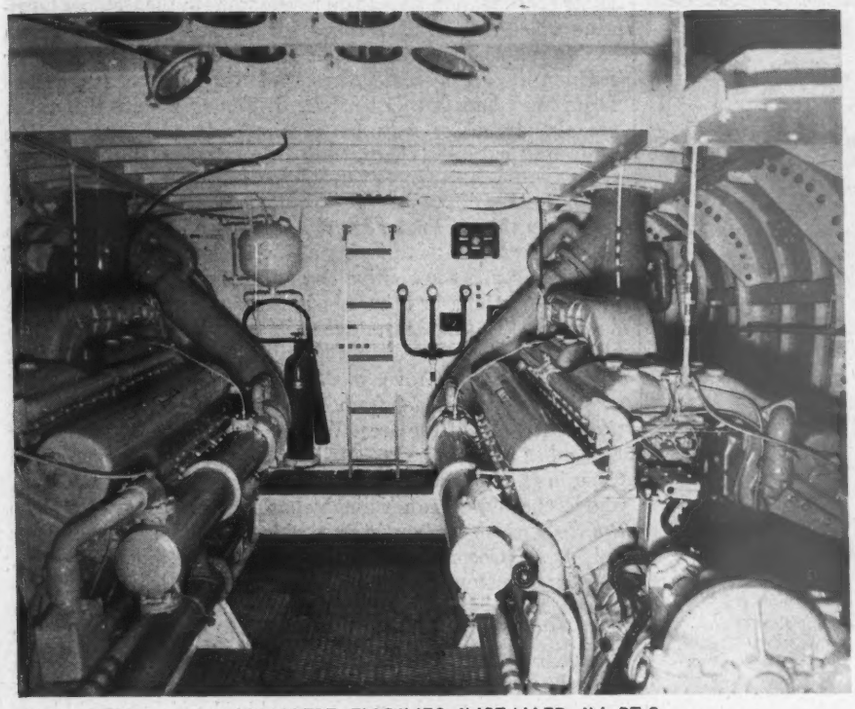
▶ Charley Beck says he'll be bringing the Six-Metre *Djinn* to Lake St. Clair next Summer. He's keeping his Eight-Metre *Conewago*. *Djinn* brings the Six-Metre racing fleet in these waters to sizable proportions with *Solenta*, *Sprig*, *Challenge*, *Noreg*, *Question*, *Totem* and *Dodo*.

FLORIDA TRADE WINDS

By Vivyan Hall

▶ The time and work put into the development of Gar Wood's sensational string of *Miss Americas* is bringing results in the war. The Wood Shipbuilding Corp., at Riviera Beach on Lake Worth, has now launched the first 200′ "experimental special service craft." For the present, the type and purpose of the new boat are unannounced but she is reported original in both design and construction. Working with Commodore Wood are several of his Harmsworth Trophy racing crew. Engine specialist Orlin Johnson is superintendent of the yard. Vance Smith and Don Nugent are on the motor installation crew and Jack Lissee is hull foreman. The latter and his father built all the *Miss Americas* after the second. The Charles Roach staff are the consulting architects for these boats which are being built for the Army Air Force.

▶ The latest four anti-submarine boats to be lend-leased at the Miami Naval Training Station went to Venezuela. Though not at war with the Axis, she has broken relations with Germany and Japan and is patrolling her oil ports. Two similar 83-footers had gone to Colombia just previously. Before that, two of these Coast Guard patrol boats had been turned over to Cuba. These



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latter checked in in time to do rescue work in the October hurricane which messed up Habana harbor pretty badly and even sank a couple of freighters right at the mouth. At the Miramar B.C. on the ocean front just west of Habana, docks as well as boats were damaged. Colonel E. R. Tausch reports that plans are already under way for repairs and enlargements. The basin and entrance channel are being dredged to a depth of twelve feet and ten concrete piers are to be put in.

▶ It was this particular tropical disturbance which broke the 767-day record of blimp flying in south Florida. Seven hundred and sixty-seven consecutive days of patrolling, that is, which proves something or other about the sort of weather we have down here. To take advantage of it, many of the pilots of both blimps and planes are acquiring sail boats for off hours. Robert Born, of Coconut Grove, was the last of these, buying the 28′ auxiliary sloop *Vandal* from Donald Holeman, another pilot transferred out of the area. Warren Daniels, of the Army Air Force, has bought the 26′ auxiliary sloop *Silver Spray II* from Captain H. H. J. Benson. Mrs. Milton Bird, of Coconut Grove, who has been racing an X dinghy has now taken on the 21′ sloop *Red Head* which she bought from Sidney Shannon. Mary Adams Calvert, of Coconut Grove, has sold her D dinghy to Mrs. Thomas Johnston who plans to train the three small Johnstons on the water. D. H. Radcliffe, whose 45′ schooner *Monsoon* placed third in the 1934 Honolulu Race, has shipped his BO dinghy from Los Angeles to his winter base at Miami Beach where he uses her as a tender for his 32′ Chris-Craft *Monsoon II*. Two large sailing yachts which served in the picket patrol have been sold back to their former owners and are being put back in commission. Philip Mallory's 91′ motor-sailer *Mystic*, from Miami, and John N. Matthews' 84′ yawl *Mayhap*, from Plandome, L. I., are both at Merrill-Stevens yard having their grey paint turned to white. The same yard is commissioning the fishing cruiser *Boca Chica* which Mallory bought from Mark C. Honeywell. Henry Howard's *Alice*, probably the best known centerboarder in the country, is going into commission at Dooley's yard at Fort Lauderdale.

▶ A number of boats are already making their winter base along the river in Fort Lauderdale. Along the north bank are G. R. Smith's schooner *Sweetheart*, from Annapolis; W. G. O'Neal's motor houseboat *Whereaway;* W. A. Foster's motor cruiser *Betty H;* and Dr. R. B. Watson's *Sea Song*, from St. Petersburg. Across the river are Horatio L. Baker's *Alcira*, from Arrowsic, Maine; R. L. Beadle's *Sea Venture;* and S. W. Schmer's *Morpheus*. Captain J. M. Burwell, dockmaster here, reports a surprising number of advance reservations. Practically all of those owners expect to use their fuel for the trip down and will use their boats as living quarters for the winter. H. Boon Porter, of Louisville, who recently bought the 45′ motor-sailer *Grey Mist*, stopped in at Daytona Beach on the way to her new home in the port of Miami. Nearby, at the Daytona Beach Boat Works, was Charles B. Lee's 65′ motor cruiser *Far West*, from Hampton. Paul Brorston, who moved this summer from Detroit to Dania, has had his 29′ Abbott Visitor brought down by trailer. She proved so smart on the Lakes that he hopes there will be some racing competition in Florida.

LIGHTNING NOTES

By James M. Trenary

▶ Famous *Aye-Aye-Aye*, No. 35, which won the first Lightning Class National Championship on Barnegat Bay, N. J., in 1939, when sailed by John Barnes, still likes a first position. Now owned and sailed by Luther Beck, of Douglaston, L. I., *Aye-Aye-Aye* finished first in the season's standing at Douglaston, with Tony Hansen in *Alfalfa* second, and Russell Collins in *Jo-al* third. The season at Douglaston was marked by light breezes. Spinnakers were outstanding in the Comedy Department. *Aye-Aye-Aye* and *Alfalfa* were dismasted in the September hurricane, while *Jo-al* was wrecked and must be rebuilt.

▶ Reports have been received that several builders are accepting orders for Lightnings for spring delivery.

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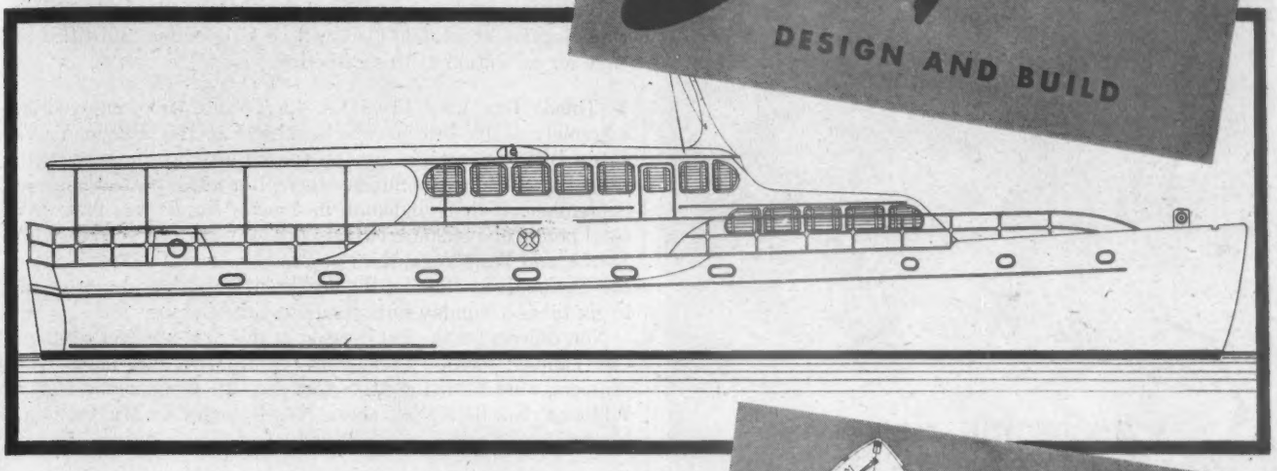

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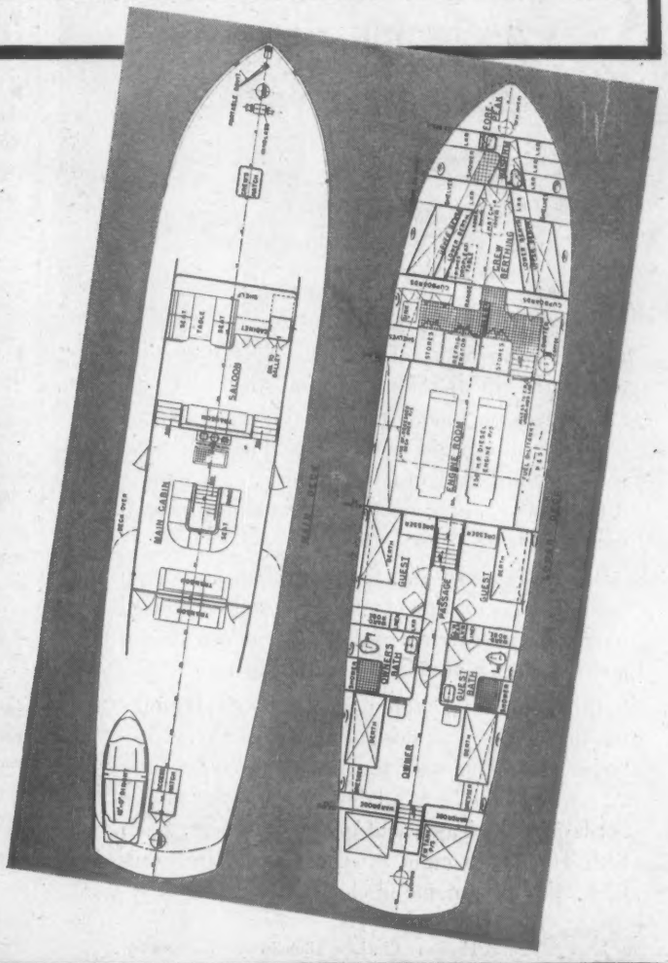

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▶ High Tor Fleet, No. 41, at Stony Point, N. Y., has four new Lightnings under construction. The new owners are Warren G. Basley, Irving T. Kennedy, Thomas Reilly and Dalton Myles, all of Stony Point.

▶ B. F. Ludwig, No. 790, squeezed out a first place for the 1944 season from Bud Robertson, No. 194, the 1943 winner of the Maple City Fleet No. 21 championship at LaPorte, Indiana. The season was perfect, with only two races postponed the entire summer.

▶ The annual meeting of the Lake Michigan District will be held at Lima, Ohio, on January 14th. As is usual with Lightning skippers in this district, a large turn-out is expected and it is hoped that the 16 mm. movies of the 1944 National Championship Regatta at Buffalo C.C. will be fully edited and titled in time for exhibition at this gathering.

▶ Toledo Bay View Fleet No. 42, Toledo, Ohio, enjoyed an extremely active season which opened at the Toledo Y.C.'s Frost Bite sweepstakes on the second Sunday in June, with races being held every Sunday thereafter until the Nationals in September. Walt Swindeman in *Yankee Doodle* was first with total points of 144.25, Art Burtscher in *Nicki Too*, second, with 134.75, and Walt Vogel third in *Rambler Too* with 128.25. After the Nationals at Buffalo, the fleet went berserk and raced four to six times a Sunday until haul-out time October 25th.

New officers for the 1945 season in this fleet are fleet captain, Cal Yaudas; secretary-treasurer, Vi McMenimin. Three new skippers were added to the fleet late in the season, Harry Williams, No. 340, Dick Daso, No. 460, and Vi McMenimin, No. 885.

▶ Four Toledo Bay View skippers competed at Put in Bay for the I.Y.A. Championship, with *Yankee Doodle* beating out *Rambler Too* by ¼ point. Karl Smither, 1943 National Champion, sailing Cal Yaudas' *Zig Zag*, finished third.

YACHTING ON THE NIAGARA FRONTIER

By Reginald H. Pegrum

▶ Under normal conditions, the ice, snow and winter storms of the Niagara area force yachtsmen indoors where boats are built on paper and where cruises are planned for some day in the future. These times are not normal and the yachting fraternity and others of this region are devoting much time to the United States Coast Guard.

The Temporary Reserves of the Buffalo District have built up an outstanding record. The U. S. Coast Guard Auxiliary was begun with the aid of boat owners who stoically devoted much time to training, and as a result were ready when the need for expansion came in late 1942. Assignment to regular active duty began in 1943. Eight-hour watches were then in force but these were later changed to six hours. By spring of 1944, the Temporary Reserve had taken over practically all of the patrol duties of the Coast Guard along the frontier. Operation of the patrol craft called upon the yachtsman's knowledge of boat-handling in all kinds of weather and at all hours of the day. The responsibilities which descended upon these men were well placed and the season's operations were eminently successful.

Great credit for the success of the whole enterprise is due to the officers in charge; all of them are local yachtsmen from the Frontier. Lt. Comdr. (T) P. J. Hunt is Divisional Captain, Lt. (jg) (T) R. B. Warman, Divisional Executive, and Ens. (T) D. P. Robinson, Junior Captain. Under these men, nine Flotillas operate on the Niagara Frontier with yachtsmen as commanding officers. This organization has been providing men for duty to the extent of nearly 5000 man hours per week for watches around the clock throughout 1944.

Faithfulness of the men to duty and effectiveness of organization are indicated by a reliability record calculated on a percentage basis high in the nineties. Before the year is out these units of the Niagara Frontier area will have completed over 200,000 man-hours of important volunteer public service. It is

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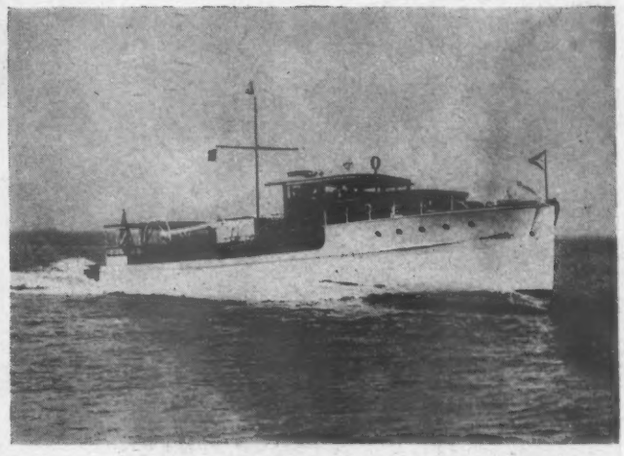

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quite possible that after the emergency is over, the Temporary Reserve or the Coast Guard Auxiliary, or whatever it may be called, will become one of the largest and important yachting organizations. Credit for the outstanding work is due to all men involved but the list is too long to be given here. The following yachtsmen, all officers (T) USCGR are in command of the several flotillas.

Flotilla 3-02	Karl Smither, Ens. (T) USCGR Raymond L. Morrison, Bosn. (T) USCGR
3-03	Alfred A. Crone, Bosn. (T) USCGR Robert A. Bollman, CBM. (T) USCGR
3-04	E. E. Tunmore, Lt. (jg) (T) USCGR Charles Ehnes, Bosn. (T) USCGR
3-05	John F. Geibel, Ens. (T) USCGR Harry H. Wesboy, Bosn. (T) USCGR
3-06	Ralph Snowdon, Ens. (T) USCGR
3-07	William A. Canon Sr., Ens. (T) USCGR Glen B. Bagley, CBM (T) USCGR
3-08	Roy Van Valkenburgh, Ens. (T) USCGR Leland Coash, CBM (T) USCGR
3-09	George Greenberger, Lt. (jg) (T) USCGR Howard M. Sharp, Bosn. (T) USCGR
3-10	Carl Nagle, Ens. (T) USCGR Paul Norton, Bosn. (T) USCGR

PACIFIC NORTHWEST CAT'S-PAWS

By Ray Krantz

▶ John L. Hawkins, of Marshfield, Ore., intends to materialize many a sail yacht lover's dream at the end of the war, when the Hillstrom shipyard of the same city is scheduled to start construction of a 65′ auxiliary schooner to his order. Although the designer, Edwin Monk, Seattle naval architect, calls the new Hawkins craft "a plain, orthodox boat, except for a doghouse aft for sheltered steering in unpleasant weather," the new windship will possess the romance of a clipper bow, and the eye-satisfying appeal of trim lines.

The vessel is to feature a gaff-headed fore, and marconi main; and a four cylinder Gray Diesel of 110 hp. and 3:1 reduction will provide power when the winds fail.

▶ Speaking of postwar yachts, the Shain Manufacturing Company yard on Lake Union, Seattle, has under construction a new streamlined "postwar" model express cruiser, built under WPB "spot conversion" authority between war contracts. Although the craft is not getting as much attention as might be desired normally, due to commencement of work on ten more 45′ Navy picket boats at the Shain plant, she nevertheless is the cynosure of all potential yacht buyers' eyes. The 55′ craft is designed to carry up to twin 300 hp. engines, and she is set off nicely with a safety-railed flying bridge. Engines have not yet been selected for the new model.

▶ YP-*635*, third of a series of new 128′ refrigerated cargo vessels of the tuna clipper type to be built by Seattle yards, was launched via marine railway on November 18th at Ballard Marine Railway Co., Inc., Seattle. Capt. H. N. Wallin, supervisor of shipbuilding, Seattle, described the work of the new vessels, at the launching ceremonies.

Two new Army vessels recently hit the water, also, at La Conner, when the Sagstad Shipyards' plant there sent BSP-*3139* down the ways on November 18th, followed ten days later by a second 88′ self-propelled wooden barge.

November 27th was Captain Axel Buholm's big day, for his newest command, the 68′ trawler *Regina*, was launched from the Harold Hansen yard ways. A 150 hp. Worthington diesel will power *Regina*. A new craft of the same type, 70′ over all, and for Capt. John Skarpness, is now in course of fabrication at the same plant; power, a 155 hp. Atlas Imperial diesel.

▶ A. H. Merchant, Seattle, has acquired through Arne Vesoja Douglas Grubb's 32′ V-bottom cruiser *Jamie*, a Jake Farrow

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MORE ABOUT THE 1945 W-C CATALOG

LAST MONTH we broke the news (without fanfare) that publication of the W-C annual Catalog will be resumed this year. Scores of old friends have already written us for their copy. They want to know what essential items of W-C "Dependable" Marine Hardware will be available in 1945. Want this new Catalog?

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boat with 50 hp. Scripps. Vesoja also sold to Melvin Thornquist for David Knight, Knight's 21′ sloop *Sail Ho*, a double-ender with 5 hp. Gray auxiliary.

In still another sale, Tom Farrell, of Washington Boat Works, sold to O. H. Johnson, Everett, F. H. Barrett's 28′ sedan cruiser *Badmar* with Gray Six-71 motor.

▶ "LT-*378*" meant more than a simple vessel designation to workers of the Barbee Marine Yards, Seattle, on November 17th, when LT-*378* ran her trials on Puget Sound, for the vessel was the last of ten 126′ ocean-going tugs built by the Barbee yards at Kennydale and Ballard, for the U. S. Army. The first five were twin screw Fairbanks-Morse diesel driven, and the last five, single screw Enterprise diesel powered.

▶ *Cat's-paws:* Two sons of S. E. Sagstad, Seattle shipbuilder, are with the Navy in the Pacific; Stanley at last reports was in the Admiralty Islands, while Howard, aboard a Navy vessel, participated in the Leyte invasion. . . . Seattle Y.C. sail men, disdaining wintry weather, hold regular races on Lake Washington. . . . Jim Tregoning, Seattle boat builder, has ideas of making a breakwater off his Shilshole Bay property with a 2,300-ton wooden vessel which he is reported to have purchased for (believe it or not!) one buck! . . . The Shain, Blanchard and Washington Boat Works yards are now building more 45′ picket boats for the Navy. . . . When the Columbia River pilot vessel *Columbia* recently arrived at Olson and Winge Marine Works, Seattle, for overhaul and repairs, she brought back memories of her rescue work in bygone years in the Arctic; and near her were the slim and speedy new 104s of the Army's rescue vessel fleet, making quite a comparison; incidentally, many of the workmen who built the *Columbia* originally, as the *King and Winge*, are now working at the Olson and Winge plant.

COMET COMMENTS

By Mac Lamborne

▶ Regional Vice President George Potts is making plans for a big Comet regatta in Vancouver, B. C., on Dominion Day (July 1). This area has found Comets the most active of the small boat classes during the past year. Potts reports progress in getting one of the boat builders out that way to start work on about 25 hulls so that Comets will be available when the boys begin coming home.

▶ There is still time for fleet secretaries to send in their season's scores to Secretary John J. Fernandes, Jr., for the High Point Trophy calculations. The deadline is January 10, three days before the annual meeting at the New York Y.C. in New York City.

▶ Chances are good for several new regional vice presidents to be named by the Nominating Committee which submits its report at the meeting this month.

▶ The Comet fleet of Green Pond Y.C., Green Pond, N. J., will hold its annual meeting in February, Secretary Herbert L. Post reports.

▶ Top leaders of Comet Class Y.R.A. — Commodore John Eiman and President Verner Smythe — were guests of Potomac River S.A. which held its annual banquet last month in Alexandria, Va. Comet sailors were presented spring, summer and fall series prizes.

▶ The Comet fleet at Medford B.C., Medford, Mass., closed a successful season with a big dinner in Malden in November. Season prizes were awarded by Lynn Marsh, master of ceremonies. The affair closed with the election of Roland Hanson as fleet captain and Edmund J. Blake, Jr., as fleet secretary. Prize winners included Fred Redding, Memorial Day race; Edward S. Benjamin, Fourth of July series; Barbara Gillett, girl skipper races; Mel Marshall, junior skipper races; Dick Strassell, Redding Trophy for skippers who have never won a first or

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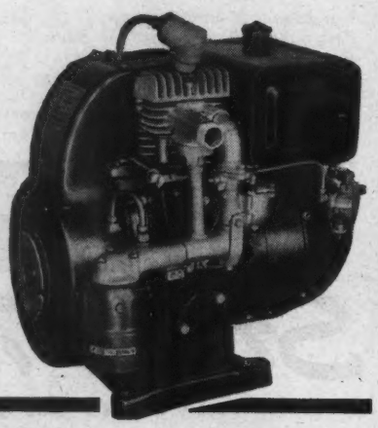

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second place; Jack Goddard, high point trophy. Fleet Captain Blake received top honors for the year, taking the Nauticeans Trophy, the Dory Cup, the Forrest Trophy and the Goddard Trophy.

▶ The five-race series for the Walter Veray Trophy at San Juan, Puerto Rico, ended with Dick Bertram placing first, scoring 48¼ points. Hector Sanchez was second with 44 points and George Lauders, third with 40¼ points. San Juan sailors closed their 1944 season with a formal dance at Club Nautico on December 16.

That invitation for skippers from the States to join sailors in San Juan for a mid-winter championship next month still stands. They are offering six boats for the visitors. Those who have attended the pre-war regattas there still talk about the hospitality.

LONG ISLAND SOUNDINGS

By Starboard Tack

▶ As a reminder of the high spots of the past season, and to whet the competitive spirit of those skippers who are thinking of the season to come (which, after all, is but five months away), from the Y.R.A. comes the 1944 tabulation of class championship standings. Space limitations unfortunately prohibit the publishing of any but the percentages earned by the leading boats, viz.:

INTERNATIONAL CLASS: *Bumble Bee*, .756; *Susan*, .755; *Sheldrake*, .743; *Aileen*, .715; *Patricia*, .689; *Alberta*, .634; *Mischief*, .629; *Grilse*, .600.

ATLANTIC CLASS: *Ariel Toy*, .726; *Whim*, .712; *Hera*, .704; *Minkie II*, .700; *Blue Ghost*, .646; *Ann*,** .625; *Mutiny*, .622; *Hound*, .577; *Teal*,* .551.

"S" CLASS: *Kandahar*, .798; *Auley*, .795; *Allons*, .777; *Woodcock*, .726; *Felicity*, .694; *Ripples*,** .687; *Elsar*, .641; *Fidget*, .591.

VICTORY CLASS: *Black Jack*, .774; *First Call*, .712; *Three Belles*, .590.

STAR CLASS: *Spook*, .381; *Zenith*, .290; *Shillelah*,** 1.000; *Galves II*,* .700.

NATIONAL 110 CLASS: *Quitz*, .783; *Hurricane*, .769; *Joyette*, .766; *Bud*, .742.

LIGHTNING CLASS: *Nola*,* .853; *Aye-Aye-Aye*,* .800; *Frolic*,** .700; *Mary Ann II*,**, .583.

COMET CLASS: *Blue Peter*, .837; *Aquilla II*, .521; *Hopeless*, .448; *Cootie*,* .666.

SNIPE CLASS: *Can Can*,** .800; *Charlene II*,** .600; *Mate*,* .500.

WEE SCOT CLASS: *Lassie*, .767; *Evelyn*, .731; *Laddie*,* .736; *Me Too*,** .454.

HANDICAP CLASS, DIV. III: *Sea Fox*, .857; *Grayling*, .526.

HANDICAP CLASS, DIV. IV: *Lone Star** .764; *Ture*, .466; *Rebel*,** .375; *Gamecock*,** .333.

HANDICAP CLASS, DIV. V: *Tzigane*, .762; *Pecusa*, .666; *Valkyrie*, .649; *Murrelet*,* .666.

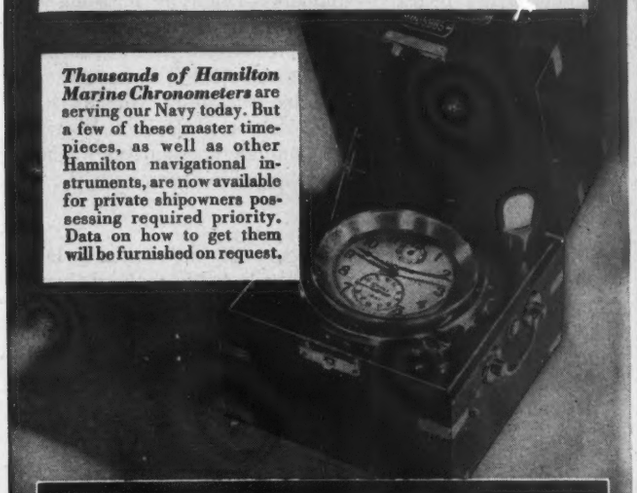
HANDICAP CLASS, DIV. VI: *Skylark*,** .909; *Cricket*, .692; *Sayonara II*, .555.

HANDICAP CLASS, DIV. VII: *Dee Dee*, .714; *Skipper*, .558.

* Not entered for Class Championship
** Did not qualify

▶ *Scuttlebutt:* The Riverside Y.C. and the Western Connecticut Lightning Fleet have joined hands to purchase a 29′ cabin cruiser so as to facilitate the skippers in question attending all of the weekly regattas held at the western end of the Sound. The cruiser, which has a 50 hp. motor rated at 12 m.p.h., has every facility for the comfort of both skippers and their crews. "Everything," reports Riverside, "is set — except gas!" . . . New officers of the Westchester Power Squadron are: Commander, James A. Haggerty; lt. commander, Harold Slauson; secretary, Schuyler W. Crunden; treasurer, Chester W. Newman. . . . The Niantic Bay Y.C., which experienced an unusually successful season in 1944, is now making real headway toward having a home of its own. Newly elected officers are: Commodore, Louis Z. Richards; vice commodore, M. M. Purdy; rear commodore, Colin F. Soule.

AMAZING ACCURACY!



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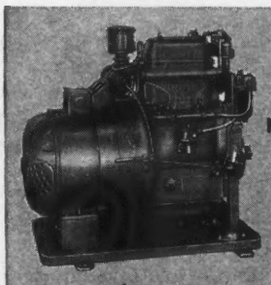

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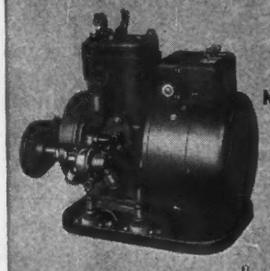

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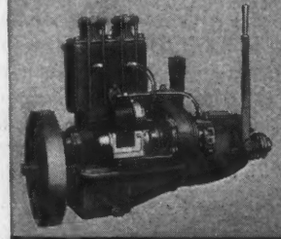

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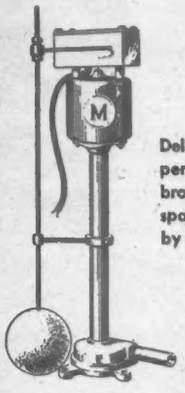

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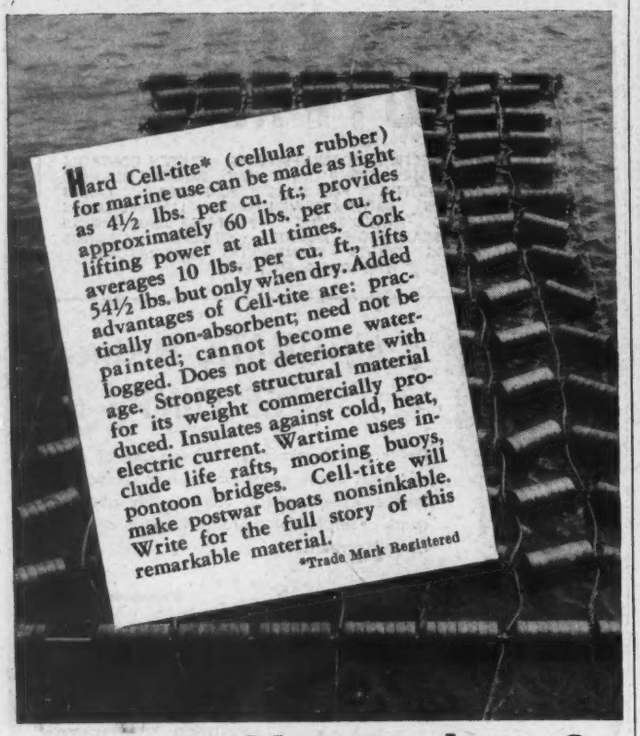
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NARRAGANSETT BAY GOSSIP

By Jeff Davis (Old Doc., rtd.)

▶ The Narragansett Bay Power Squadron has elected Leo R. McDevitt commander, Leighton T. Bohl lieut. commander, Charles R. Ballou secretary and Harry Leach treasurer.

▶ The Rhode Island Y.C. reëlected all but three members of the previous year's board, Commodore Leighton T. Bohl, Vice Commodore E. Victor Conrad, Rear Commodore Alden R. Wells, Secretary Robert F. Abel, Treasurer Howard F. Hopkins, directors at large Edward S. McCreery and George Armitage and chairman of the race committee Hookon R. Norgaard. . . . William G. Norton, commodore; Vincent G. Hanson, vice commodore; Otis S. Ganong, rear commodore; Augustus F. Franz, secretary and Norman H. Kazanjian, treasurer, are the new officers of the Newport Y.C.

▶ Max Zimmerman, former owner of the Fisher's Island *Azure*, has bought the M.S. Class auxiliary knockabout *Cue Ball* from Morton and Ernest E. Quantrell, of Groton, Conn. . . . Paul Everson has bought the 27′ auxiliary knockabout *Pandora* from Dr. Philemon Truesdale. *Pandora* was originally the launch on Commodore Arthur Curtiss James' bark *Aloha*, which Dr. Truesdale bought when *Aloha* was junked.

▶ The Newport Y.C. has gone journalistic and is getting out a mimeographed monthly sheet called the *Harbor Howl* which is sent to all members in the service.

▶ John Nicholas Brown, who bought the Chinese-built auxiliary cutter *Orient*, has her at the Manchester and Williams yard at Newport for overhauling. . . . Albert T. Stearns' schooner *Mohawk* has been sold to Fred Dion, of Salem. . . . Commodore Russell R. Hunt's auxiliary catboat *Adventurer*, which managed to get jammed in between the Edgewood Y.C. and the sea wall and pretty well wrecked, has been bought by Samuel Cunha, of Bristol, and taken to Wardwell's, at Popposquash, to be rebuilt.

▶ The new addition to the Rhode Island Y.C. property, two tall little buildings at the sides of the shore end of the walk to the house, may look like sentry boxes, but they're not. One houses the gas meter and the other the gasoline booster pump. No, Chick Sale didn't design them.

MAINE COAST NOTES

By Lawrence B. Getchell

▶ A record-breaking tide, torrential rain and a 58 m.p.h. gale combined to cause great damage along this coast on November 30th. Three fishing vessels were wrecked at Bar Harbor, one at Rockland, and one at Southwest Harbor. Altogether, more than 100 craft are reported to have been smashed by the storm. The loss to Maine's 4000 lobster fishermen may run well over the $500,000 mark. Camden estimated its waterfront damage at $50,000 while Northport lost the wharf and building owned by the Northport Y.C.

Apropos of this storm, it was just about 46 years ago that Maine was stricken by her greatest tragedy of the sea, a tragedy as mysterious as the tale of the *Mary Celeste*. In November, 1898, the steamer *Portland*, Capt. Hollis H. Blanchard, master, sailed out of Boston into the teeth of a nor'easter and was never heard from again. Neither were any of her 176 passengers and crew seen alive thereafter. At a recent meeting of the victims' descendants it was stated that William George, a deep sea diver, believes he has located the *Portland's* bones at a point 4 miles north of Highland Light and 4½ miles due northeast of Race Point in 22 fathoms of water.

▶ The Northeast Harbor Fleet has acquired the building formerly used to house air raid spotters at Northeast and will use it as a club office. This will allow the present building on Rock End Dock to be used as a club room and storage unit. The Fleet has rebuilt the seawall behind the dock.

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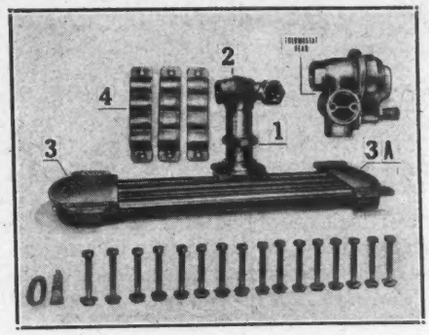

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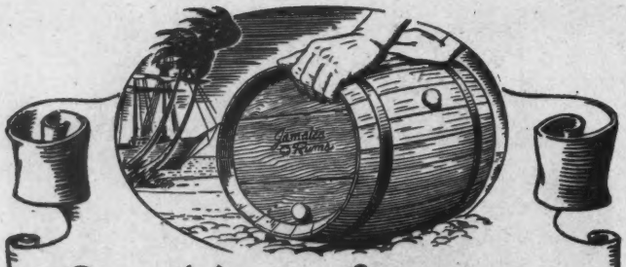

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▶ Porter Johnson has bought the 109′ schooner yacht *Cleopatra's Barge*. It is understood she will be completely overhauled this winter by Frank L. Sample, Jr., Inc., and be placed in commission next spring. Russ Genner, of Port Washington, N. Y., has bought Henry Hinckley's knockabout *Hilda* and Bill Johnston's M. D. I. *Congé*. William Burden has bought the Northeast Harbor "A" boat *Yo Ho* from Walter Eversman who has purchased the 30-Square-Metre *Winsome* from William Cochran, Sr. Howard L. Rich has sold his 45′ ketch *Yram* to Henry Baay.

▶ Newly elected officers of the Penobscot Y.C., of Bangor, are: Dr. Maurice P. King, commodore; Kenneth E. Twitchell, vice commodore; Roland E. Barter, secretary; James D. Maxwell, treasurer.

▶ The Bath Iron Works has launched the first U. S. warship to be named for a woman of the Navy, the USS *Higbee*, a superdestroyer. Mrs. Lenah S. Higbee, RN, was the first superintendent of the Nurse Corps, USN.

▶ What may remain one of this war's sea mysteries had a happy ending recently when a 27′ heavy duty lifeboat was presented by the crew of the fishing vessel *Helen Mae II* to the Rockland Sea Scout Ship *Red Jacket* which is skippered by Dr. Joshua Southard, commodore of the Rockland Y.C. The lifeboat, one of the latest models, was found adrift by the *Helen Mae II* near Moose Peak. She was unmarred, fully provisioned and completely equipped with gear (including sails) at the time of discovery.

▶ The slackening of government orders for wooden boats has turned many of Maine's shipyards to commercial building with the result that the launchings of new fishing vessels are somewhat automatic, or so it seems. Among the recent ones are the 65′ dragger *Camden*, built by the Camden Shipbuilding & Marine Railways Co.; the 96′ dragger *Mary J. Hayes* and the 101′ *Virginia*, built by Morse Boat Works at Thomaston; the 100′ *Edith & Lillian*, built by Waldoboro Shipyard, Inc.; the 95′ *St. Christopher*, built by Reed Bros., of Boothbay Harbor; the 60′ *Sea Fox*, built by Southwest Boat Corp.; and the two 77-footers *Ethel C* and *Eugene H* built by Newbert and Wallace.

LAKE ONTARIO NEWS

By W. Peck Farley

▶ With Rochester in the grip of a blizzard and your correspondent snowbound for three days, we must conclude that the sailing season is over for this year — except for fireside "sailing."

▶ John Williamson, skipper of the *Blue Moon*, has donated the Blue Moon Cup for annual competition. This cup is of historical significance as it is the original cup raced for by sail boats flying the Youngstown Y.C. burgee.

▶ Bud Doyle, skipper of *Bangalore*, carried the Youngstown Y.C. colors pretty well around the Great Lakes this summer taking part with distinction in several regattas.

▶ Chuck Spaulding is to be congratulated on his efforts in reviving the Lake Y.R.A. which has not been active since 1941. Chuck wrote letters to all member clubs expressing the views of the Youngstown Y.C. and asking for expression from other clubs. It is felt by a great many that, since other racing associations on the Great Lakes have been holding interclub competition, it was perhaps detrimental to the best interests of yachting for the L.Y.R.A. to remain inactive. A meeting of the Association will probably be held in January and the prospects for the Freeman Cup Race and regatta next summer look promising.

▶ The Coast Guard Temporary Reserve at Youngstown, Rochester and many other points on Lake Ontario, has been put on an unassigned status subject to recall to active duty

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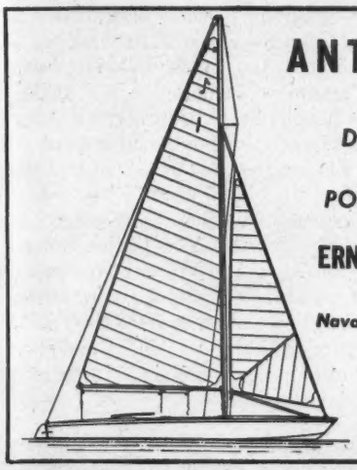

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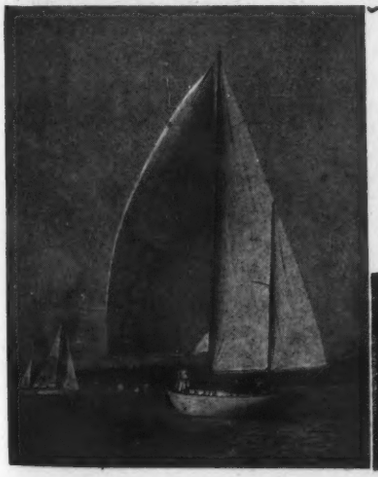

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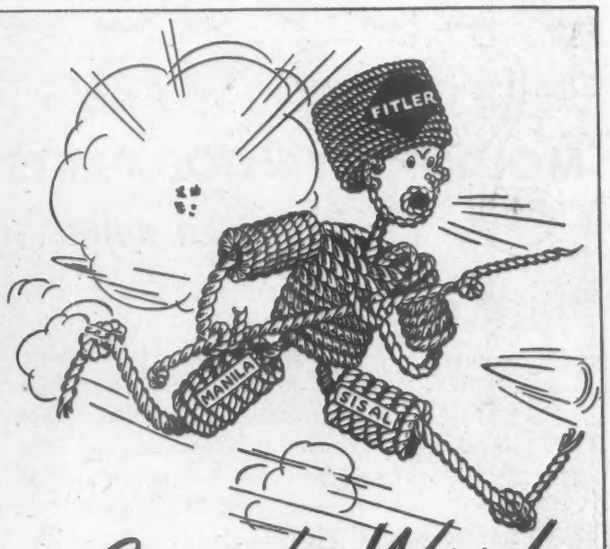

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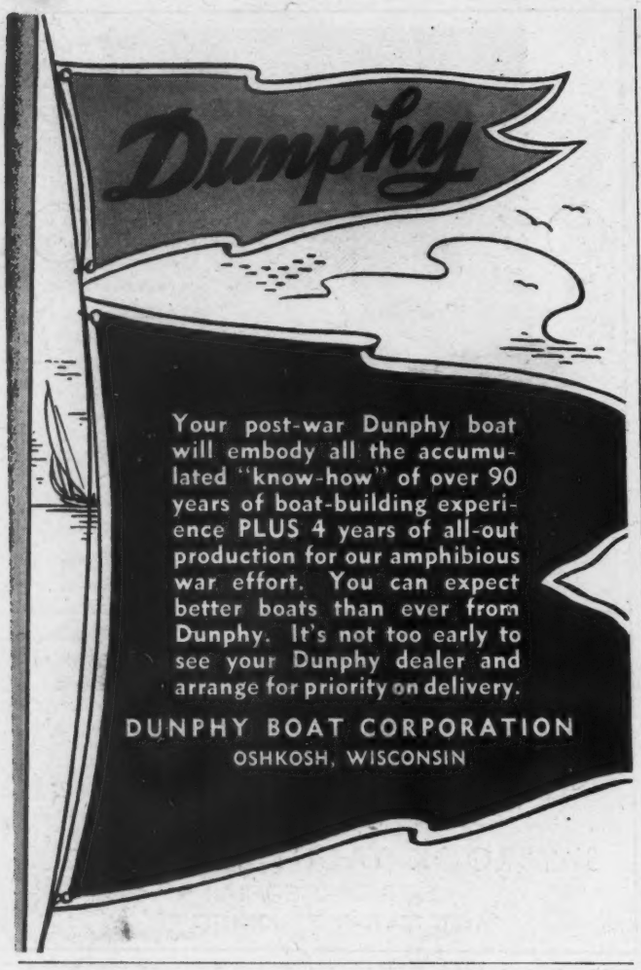
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should an emergency arise. The boys did an excellent job and also received invaluable training under this program.

▶ The Rochester P.S. this fall has the largest class in Piloting and Small Boat Handling that it has ever had. At the annual meeting, 17 new Pilots, four new Junior Navigators and seven new Advanced Pilots were announced. The interest in the Power Squadron and the size of the new class point to many more becoming boat minded after the war, as a large proportion of men in this fall's class are not boat owners.

▶ Ernie Sigmund and Vinnie Logan, of Nine Mile Point Y.C., have recently left for the Navy and Army respectively. This makes a high percentage of men from this club in service and leaves only ten boat owning members. These ten are stout-hearted, however, and are determined to keep the club operating till the boys come back.

▶ Earl Snyder, of the Rochester Y.C., has just sold his three times champion Six-Metre *Djinn* to Mr. Beck, of Detroit. What Earl's plans for next season are we have been unable to learn but it is presumed he'll be on the line with the first gun of the spring. . . . Howard Klitgord, the dinghy sailor who won the Six-Metre race in the Champion of Champion Series, liked the big boat so much he has bought Frank Hanratty's *Jill* and expects to show the Six-Metre boys a thing or two next summer. . . . Peck Farley sold out his interest in the schooner *Lotus* and is now boatless for the first time in 25 years.

The following nominating committee has been named to make up the Rochester Y.C. slate for 1945: John Taylor, Roland Roberts, Les Bartlett, Jim Donaldson and Vincent Mulvey.

Charles Rawlings, who could always spin a sea yarn better than anyone we know, has been home recently from the Pacific theater where he has been reporting on the war. Chuck had some grand tales to tell in his own inimitable style and they were well worth listening to.

▶ With skim ice on the basin and a severe labor shortage, Greeley Strickland has had a tough job getting the boats hauled out for winter storage. There are only two left in the water, however, and when this goes to print they too will doubtless be under winter cover.

▶ It is with the deepest regret that we note the death of Ensign Gardner Anstice. "Timmy" was a flying instructor and lost his life in a crash landing at the Naval Air Base at Peru, Indiana. "Timmy's" bright smile and cheery "hello" will be missed around the club.

WEST COAST BUBBLES

By Kent Hitchcock

▶ Balboa Y.C.'s annual winter sailing series brought out a swell entry of 25 boats in three classes for the first of the week-end sailing events that will continue throughout the winter season. Each class raced two laps of the BYC lower bay course in the breezy westerly that kept all hands on their toes. Results: P. C. Class (10 entries), Sid Wilkinson, *Koala*, B.Y.C., 1st; Harry McKinney, Jr., *Misty*, Cabrillo Y.C., 2nd; Jack Hillman, *Misty*, N.H.Y.C., 3rd.

Snipes (10 entries), Drew and Marshall Gram, 14 pts., 1st; Bob and Betty White, 18½ pts., 2nd; Ken Croan, 20½ pts., 3rd. P.C. 14-ft Dinghies (5 entries), ties for first between Bill-Sue Ficker and Dick Fenton, each with 5½ pts.; Burt Russell, 13 pts., 3rd; Lt. Ray Green, U.S.N., 15 pts., 4th.

▶ The Walker Plastic Co., of Burbank, now has several experimental all-plastic dinghies in the water at Balboa. Yachtsmen are showing interest in the 19′ sailing Kingfisher pram as well as a little transparent yellow job that would be a delight to carry as a tender on any kind of a pleasure boat. Both boats are very light and, from evidence of demonstration, will stand terrific punishment. They require no paint, as the color is dyed in the skin coat, and are asserted to be impervious to the attacks of marine growth.

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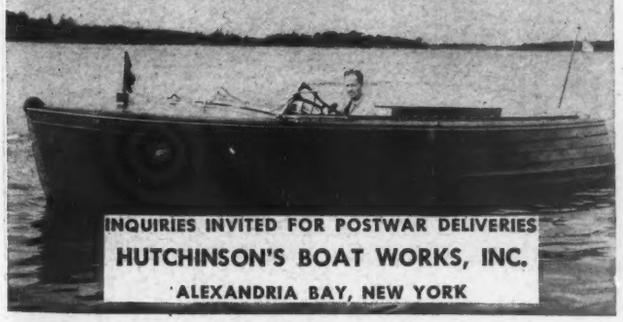

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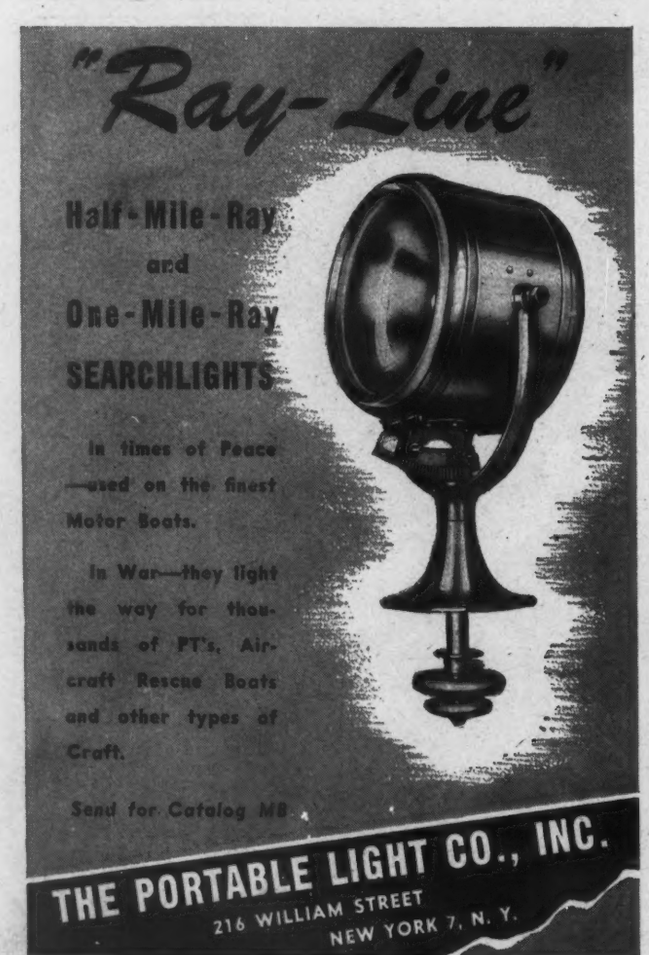
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▶ Consolidated Steel Co., now operating in the former Ackerman Boat Co. yards at Newport, is laying down two 170-ton steel tuna clippers on a government contract. The company also announces that the Newport yard will soon begin construction on a railroad tug float for San Francisco Bay, the largest vessel to be built in Newport Harbor.

▶ Stephens Brothers, of Stockton, have been awarded the Army Navy "E" for excellence in war production. This fine Northern California firm has completed a number of contracts for both the Army and the Navy.

▶ Several yachts suffered damage in the late November storm which scorched through Newport Harbor for only a few hours. The 28′ auxiliary sloop *Penguin*, owned by A. N. Kemp, vice commodore of the B.Y.C., piled up on the rocks and suffered considerable damage. Al Gordon's *Florida Star* and Harold Mason's 50′ cruiser *Idle Hour* weathered the beating with some damage.

▶ The 100′ yacht *Zombie*, recently decomissioned by the Coast Guard, has been purchased by Virgil Hamm of Hollywood.

▶ Converse Wurdeman has purchased Rhodes No. 17, the *Sunbow*, from Richard Spalding and will change the 33-footer's name to *Mid Ship*. . . . M. S. Stoughten, of the BYC, is the new owner of Rhodes No. 16, the *Normellon*, formerly owned by G. M. Giannini, and Harold H. McFarland is now sailing No. 12, *Mistress*, recently owned by Alfred E. Smith.

▶ Down at Lido Yacht Anchorage at Newport Harbor, lovers of fine boats are enchanted with two of the fabulous little "Teak Ladies." These charming little yachts were designed by Ping, a young Chinese graduate of M.I.T. and hand-built by Chinese artisans at the A. King Slipway at Hong Kong before the war. Every inch of these handsome little sailers, from fastenings to fittings, was hand-wrought and hand-fashioned and they sail like a dream.

▶ Work is progressing on the new ocean entrance for Alamitos Bay which will in postwar time become one of Southern California's first new yachting centers.

▶ Los Angeles Y.C. has fired a return dinghy race challenge at Newport Harbor with the proposed series of team races to be sailed at Newport Harbor. Newport won the first round sailed in November and L.A. is hot for a return bout.

▶ Newport Harbor Y.C. announces officers for the coming year: James L. Rubel, 1944 vice commodore, succeeds Cleland F. "Bill" Baxter in the commodore's chair; Henry Grandin moves from rear to vice commodore and Everett Morris, a member of the board in 1944, will serve as rear commodore.

▶ Clay Smith and Joe Guess, of the speed boating clan, are building up a Ford 6 block as a prospective power plant for the 225 cu. in Div. II Class. This is the first news of an attempt to convert one of the straight line Ford 6's to racing use and may result in some interesting developments in this numerous and very fast class.

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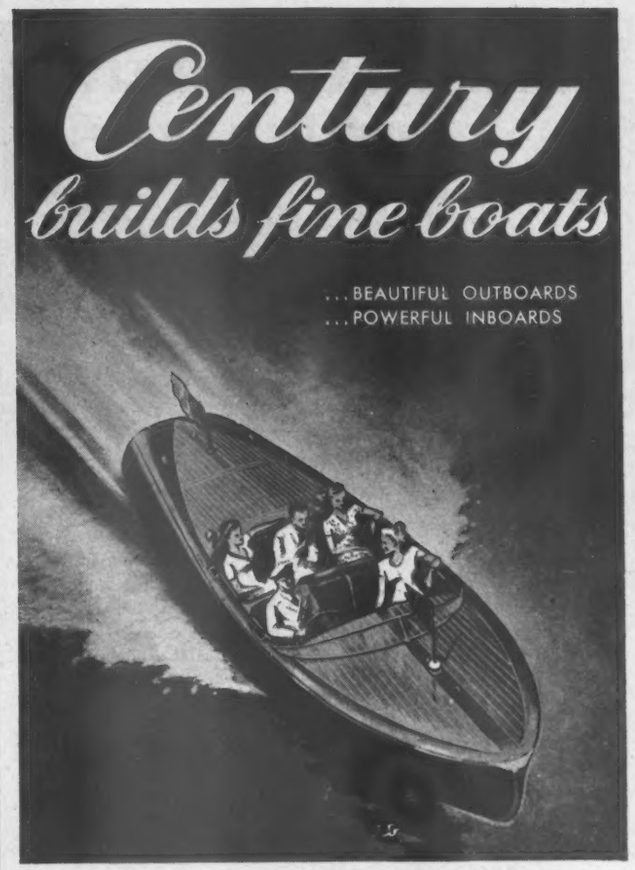

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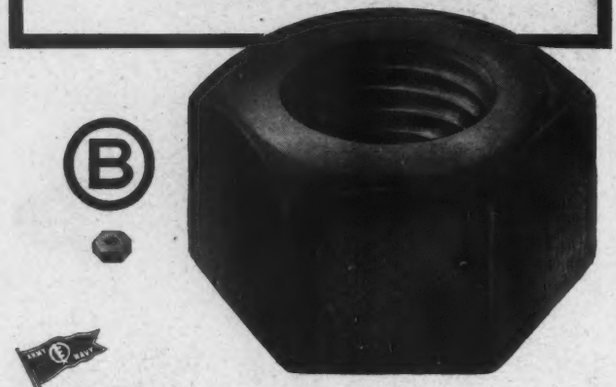

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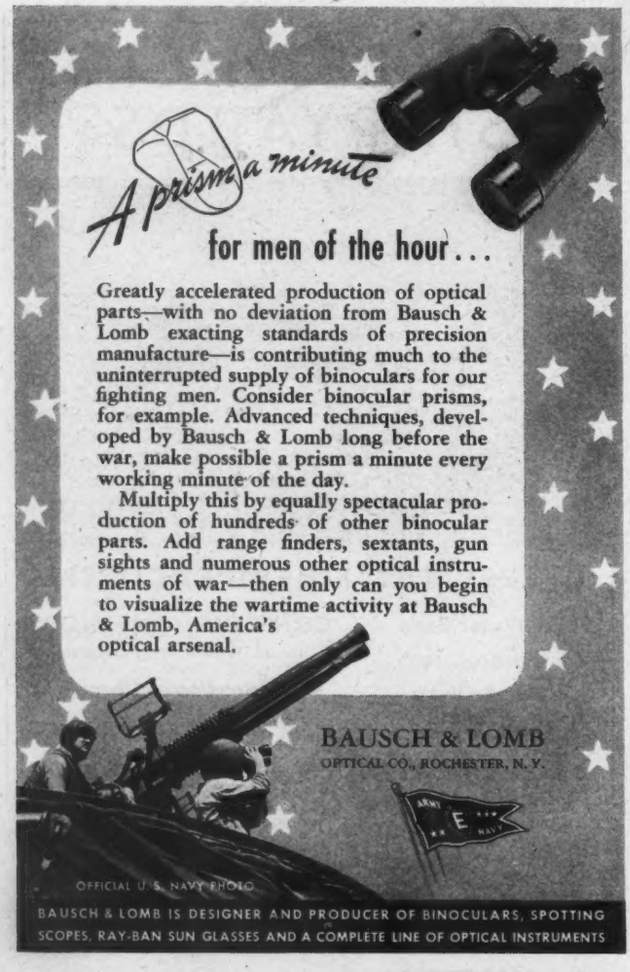
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BAUSCH & LOMB IS DESIGNER AND PRODUCER OF BINOCULARS, SPOTTING SCOPES, RAY-BAN SUN GLASSES AND A COMPLETE LINE OF OPTICAL INSTRUMENTS

POSTWAR POSTSCRIPT

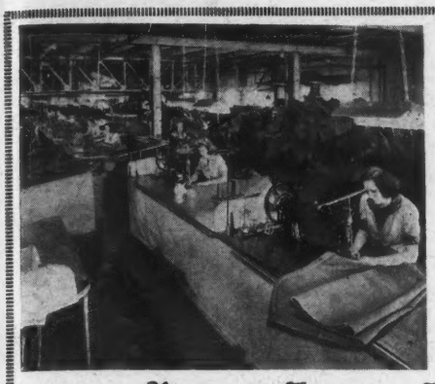
▶ Gar Wood's fleet will "incorporate new designs, new engineering and new styling" according to J. E. Clifford. . . . Old Town canoes and boats will be on the market just as soon as building restrictions are removed. . . . The Burger Boat Company is planning a highly diversified fleet. . . . Dunphy's postwar ideas are still in the development stage, but it reports progress on a number of new models. . . . The Bohman Co., successors to the Peyton Co. of Newport Beach, has completely modernized its yard. . . . The Penn Yan postwar fleet, particularly the inboard boats, will be completely redesigned. . . . As soon as war work eases, the Defoe Shipbuilding Company will put its architects and engineers to work on new pleasure craft construction. . . . The Greenport Basin and Construction Company is planning to build stock models in both wood and steel.

▶ The new Champion outboard is described as an "innovation". . . . Packard and Cooper-Bessemer will again be active in the pleasure boat field. . . . AC and Champion spark plugs, Willard, Exide and Philco storage batteries, and Syntron shaft seals — a few of the many marine products now on the priority list — have been improved for postwar use. . . . Everdur, Tobin bronze and other marine products of the American Brass Co. will again be available as quickly as conditions permit. . . . The G. Walter Machine Co., manufacturers of Clean Flo fresh water coolers, has added new models for application to any postwar engine, either gasoline or diesel. . . . Young marine type drop windows, used extensively on various types of warcraft, are expected to find wide use on postwar craft. . . . With manufacturing facilities greater than in prewar days, Perkins Marine Lamp and Hardware Corp. expects to swing into production for pleasure craft the moment the WPB grants authority. . . . Jones Multirange hand tachometers will find even greater use in shipyards and marine service stations. . . . Inquiries from shipyards indicate many postwar installations of Morse Chain Co.'s marine transmissions.

▶ The Dow Chemical Co. is of the opinion that magnesium booms and spars are practical, but points out that they must be painted if used on boats operating in salt water, as salt has a corrosive effect on magnesium. It also thinks that the progressive boatbuilder will find that another Dow product, Saran, is ideal for screens and a co-product of the material from which marine fabrics are made, as it neither corrodes nor mildews. . . . Speaking of fabrics, S. Appel & Co. state that new materials, better fabrics and improved waterproofing processes will be used to improve their postwar nautical garments. . . . Seaporcel, the ceramic coating, will find increased use in galleys, toilet rooms and fixtures such as mufflers, cowlings and water tanks.

▶ Hilbilt Boats, Madison, Ind., expect to continue turning out their distinctively designed river cruisers. However, instead of building only to order as in the past, they plan to concentrate their production on one redesigned model, which will probably be 33′ o.a. They also state that "experimental work with a modification of the molded process will continue, and it is expected that we shall be prepared to produce hulls by that process as soon as materials are available." . . . General Motors will market a G.M. Series 71 marine diesel, which will be available in three-, four- and six-cylinder models, and multiple engine combinations such as Twin-4, Twin-6, Quad-4 and Quad-6. . . . Pettit Paint Co., Belleville, N. J. has announced a "Skidless" deck paint which, while rough, is relatively glossy and comparatively easy to clean. It will come in six standard colors.

▶ The Truscott Boat & Dock Co. has done considerable research and experimental work with thermoplastic laminates and is of the opinion that this material can be used extensively for deckhouses, furniture, decks and — at a future date — for the hull itself. . . . The South Coast Co. is also doing research in the field of plastics as well as other new building materials. South Coast, in addition to building its many prewar favorites, will continue to distribute Owens cruisers in Southern Califor-



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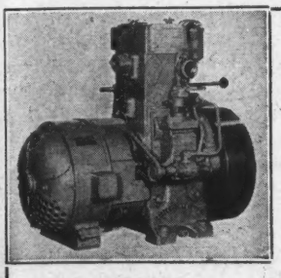

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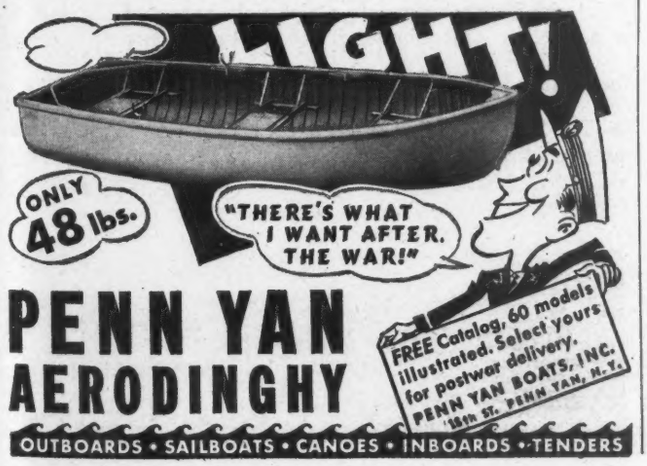
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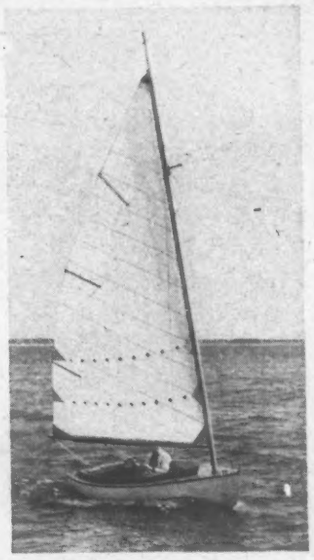

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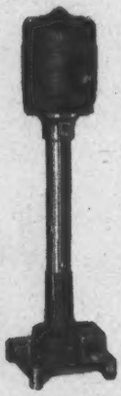
MODEL BPM NON-AUTOMATIC

An exceptionally sturdy complete pumping unit designed for dependable service on all sail and motor boats. Unlike many bilge pumps which are simply a shaft hole drilled in a casting and driven by a small motor, this pump contains two long oilless bearings with an auxiliary oil wick in the body and is operated by a motor of approximately double the power commonly used. All parts are produced by interchangeable jigs and are replacable.

Model BPM Non-Automatic

Model	Volts	Amp.	Price Each
BPM-6	6	6	$19.50
BPM-12	12	3	21.50
BPM-32	32	1 3	23.50
BPM-110	110	33	26.50

14½" high. Floor area 3½"x3¾". Weight 6½ lbs.

Model BPA Automatic

Model	Volts	Amp.	Price Each
BPA-6	6	6	$27.50
BPA-12	12	3	28.50
BPA-32	32	1 3	29.50
BPA-110	110	33	31.50

14½" high. Floor area 6"x4¾". Weight 11½ lbs.

Sutton Manufacturing Co.
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nia. . . . Radiation Products, Inc., Los Angeles, has four new models of marine radio-telephones in production. . . . Lister-Blackstone is building a new combination marine auxiliary, complete with generator, air compressor and water pump, which is much smaller in size than the prewar unit. . . . The Morse Chain Co., Detroit, Mich., anticipates wide use of its reduction gears in cruisers and auxiliaries of all types and sizes.

NEWS OF THE INDUSTRY

POSTWAR RECONVERSION

▶ "Members of the boating industry," states Ira Hand in his summary of the accomplishments of the past year, "are happy in the knowledge that theirs is one with practically no serious reconversion problems. Staffs of boatbuilding and engine manufacturing plants are devoting considerable study to improvements that may be looked forward to in recreational craft.

"Deferred demand; increased buying power through savings bank deposits and accumulation of war bonds; improvements of Federal waterways and extension of man-made lakes; recreational urge by war-weary servicemen and civilians alike — these are but a few of the basic factors that serve to brighten the future outlook for the boating industry. And the industry that proved its value in a time of national emergency will equally well prove its worth in the coming days of peace."

IN THE NEWS

▶ T. R. Whitehead has purchased the Eau Gallie Yacht Basin, Eau Gallie, Florida. . . . The Central Marine Chamber of Commerce, Chicago, Ill., has initiated an unusually active season of organizational meetings. . . . Charles H. Larkin has been made New York state representative of Michigan Moulded Plastics, Inc. . . . Frederick R. Huntington, N.A., has joined the Cape Cod Shipbuilding Corp. at Wareham, Mass., and is now engaged in designing a new line of boats for that firm's postwar production activities. Mr. Huntington has been associated with Sparkman & Stephens and various shipyards. . . . Walter E. Peek has been appointed sales manager of Electronic Laboratories, Indianapolis, Ind. . . . Reginald T. Tolman announces the reopening of the Furnans Yacht Agency, New Bedford, Mass. . . . The Paulsen-Webber Cordage Corp. has opened a branch office at 131 State St., Boston, Mass.

THE INDUSTRY IN PRINT

▶ The heroine of "They Fight the Axis Devilfish," George Sessions Perry's dramatic story of mine sweeping operations which appeared in a recent issue of *The Saturday Evening Post* was YMS *29*, built by the Greenport Basin and Construction Co. . . . General Motors has recently published a vividly presented account of the role of the GM diesels in the war entitled "The Power to Win." . . . Western Electric's "Circuits For Victory" summarizes the part played by communications in modern warfare. . . . From AC Spark Plug Division of General Motors comes "On Two Fronts," which describes its diversified wartime activities. . . . The Wheeler Shipyard's "Interim Report" presents a pictorial account of the design, construction and equipping of the 83′ Coast Guard cutters.

ON THE PRODUCTION LINE

▶ The Submarine Signal Company, Boston, Mass., has been awarded the Maritime Commission's "M" for production excellence. . . . The Oxford Boatyard Co. has received the Army-Navy "E".

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CHARLEVOIX • *The Beautiful* • MICHIGAN

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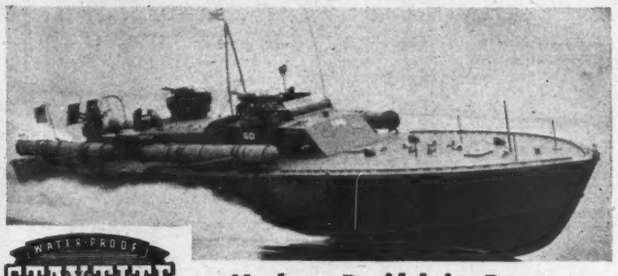

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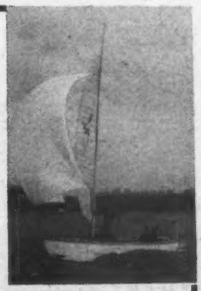

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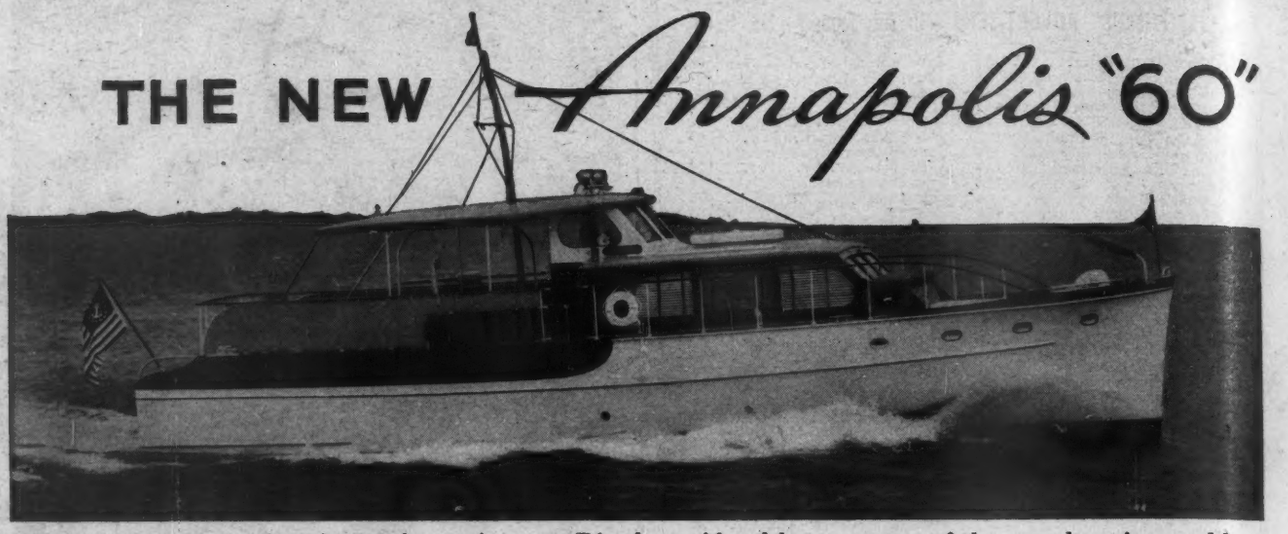

THE "SHANGRI-LA", *above*, is a 57 foot twin screw Diesel, considered by many one of the most luxurious and best arranged yachts of her size ever built. Now add three feet to the Shangri-La's length. Then add many of the wartime improvements in machinery and electrical equipment and you've got the new post-war Annapolis "60".

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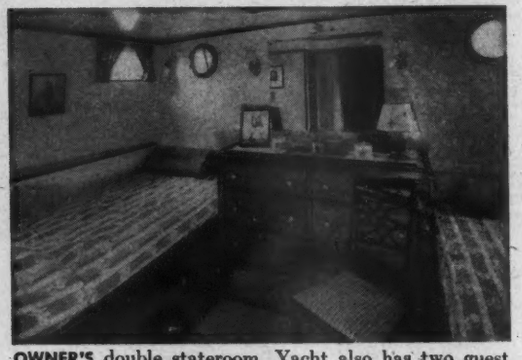
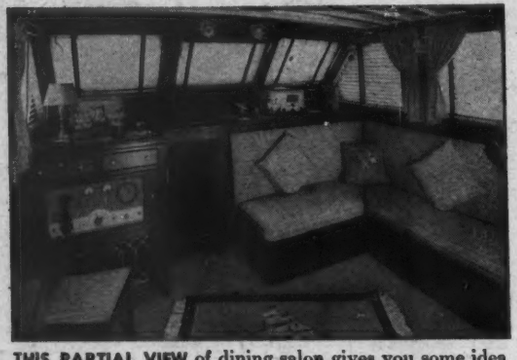
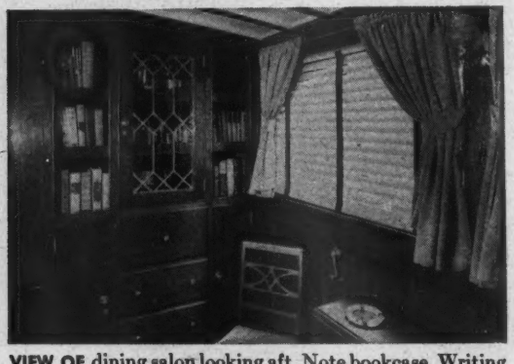


OWNER'S double stateroom. Yacht also has two guest double staterooms, hot and cold running water and electric toilets. The galley extends full width of yacht giving excellent cross ventilation.



THIS PARTIAL VIEW of dining salon gives you some idea of yacht's luxurious accommodations. Interior finished in selected hardwoods. Two shower baths located in owner's quarters. Spacious quarters and shower provided for crew.



VIEW OF dining salon looking aft. Note bookcase. Writing desk concealed in top drawer. Deckhouse equipped with venetian blinds. The Annapolis "60" is ready to be placed in production the instant Uncle Sam says "go".

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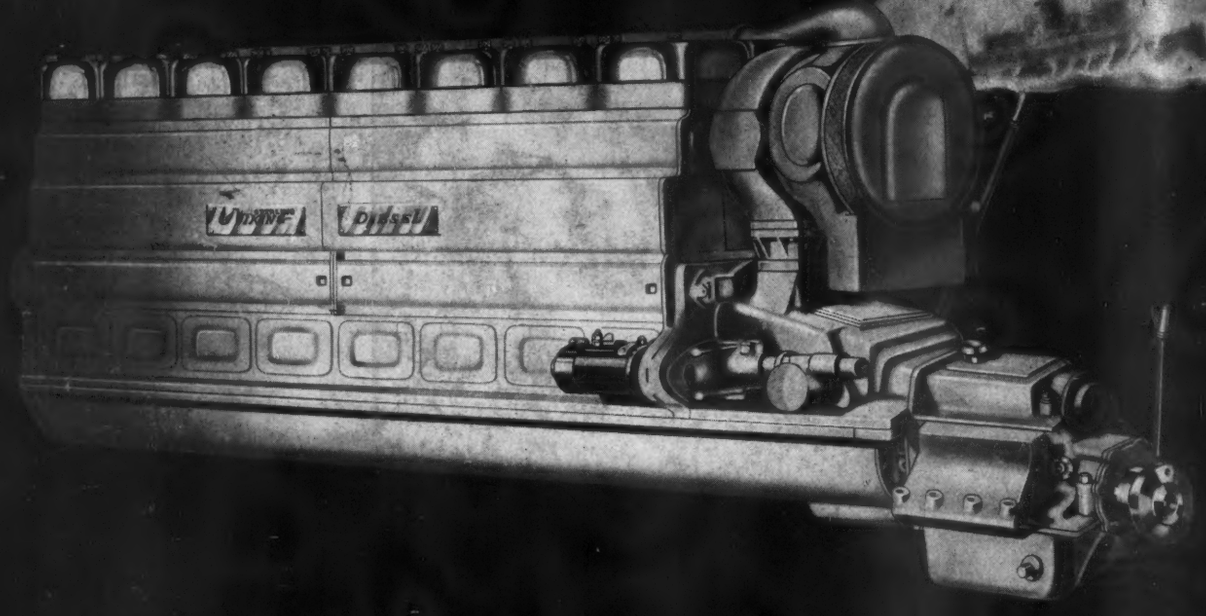

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